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YEAR AROUND

CHRYSANTHEMUM

MANUAL



1956
EDITION

Gloeckner CHRYSANTHEMUM MANUAL

WE take great pleasure in presenting to you our 1956 edition of the Gloeckner Chrysanthemum Manual.

In providing this Manual, we hope to make year-around chrysanthemums an easier and more profitable crop for you to grow. We know that you will find it useful in planning your crops during the year ahead.

This Manual contains all the latest information on growing and timing chrysanthemums. Changes are made each year as new information in culture is brought to light. By reading the Manual you will be brought up to date on all latest developments. If some points are not clear to you do not hesitate to write us or to contact your Gloeckner representative who is well versed in the culture of this crop.

"OUR INTEREST IN YOU AND YOUR CROPS BY NO MEANS ENDS WITH THE SALE, AS WE ARE MORE THAN ANXIOUS TO HAVE THE MATERIALS WE SELL, GROW AND PROVE PROFITABLE TO YOU."



TERMS OF SALE

Fifty rooted cuttings of each variety is the minimum that can be supplied. More than 50 of a variety must be in multiples of 50.

Any changes or cancellation of chrysanthemum orders must be received at least 30 days before shipping date. Every effort is being made to deliver stock which is free from pests, but purchases must be made with the understanding that we assume no responsibility for losses which may result from same.

To facilitate deliveries, cuttings will be shipped on Monday and Tuesday of each week.

WARRANTY AND LIMITATION OF LIABILITY: Subject to the limitations of liability herein set forth, we warrant that the seeds, plants or bulbs sold are as described on the container, within recognized tolerances. Our liability on this warranty is limited in amount to the purchase price of the seeds, plants or bulbs. In no event shall we be liable for the crop, or for any loss due to the failure, impairment or quality thereof or varietal variance therein, whether such loss results from breach of the foregoing warranty, from breach of any other provision of the buyer's contract for purchase of said seeds, plants or bulbs, or from any other cause.

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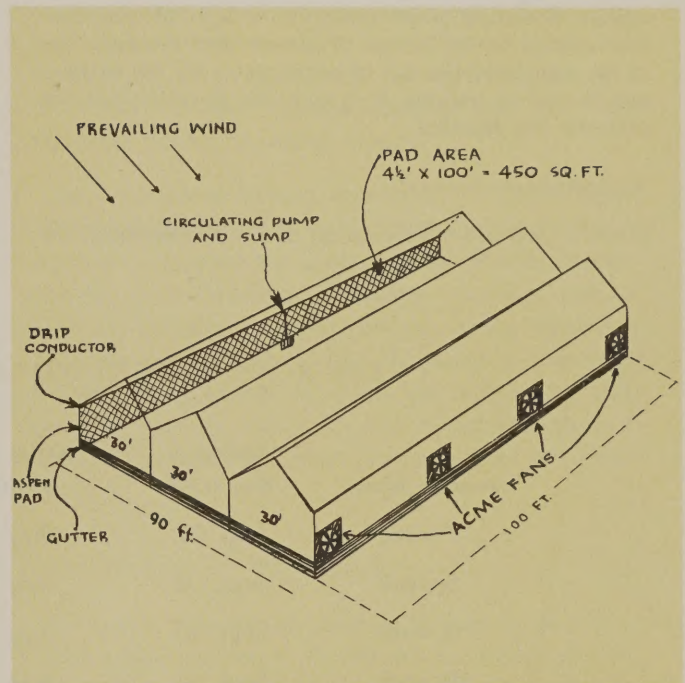
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Greenhouse Cooling

Three years ago greenhouse owners would have balked at the possibility of economical greenhouse cooling. Today, however, many greenhouses throughout the country are now air conditioned. It has been found that evaporative cooling will lower the temperature even in the high humidity areas sufficient to eliminate heat delay in chrysanthemums. In the Denver area the air cooled greenhouses are 20 to 30° cooler than the regular greenhouses while in St. Louis they have a difference of 15 to 25° in favor of evaporative cooling. We need a lower temperature during the daylight hours when the humidity is usually low and that is the reason why it is possible to maintain inside greenhouse temperature within 5° of the outside wet bulb temperature.

Important Features Concerning Installation

1. Install Aspen Padding on side of greenhouse with the prevailing wind.
2. Selection of fans should be from the 36", 42" and 48" series where possible. From the standpoint of operational cost and efficiency, low RPM ratings should be used.
3. Pads should be thoroughly saturated in all areas.
4. When this greenhouse cooling system is operating properly it is possible to maintain inside greenhouse temperature within 5° of the outside wet bulb temperature. This usually will be from 10° to 15° cooler than existing outside temperature.
5. All ventilators and doors should be closed when the system is in operation. Broken glass and air leaks should be repaired.
6. Aspen Pads should be replaced after six months of operation.
7. Fans should be located at lower levels at side walls whenever possible.
8. Baffles of plastic material can be suspended in problem areas to properly control air flow.



Installation Requirements for Cooling Greenhouses

The Acme Equipment Co., of Muskogee, Okla., outlined the basic engineering used in all major installations and recommends the following:

1. **Amount of Air to Exhaust:** Determine the area of the greenhouses in square feet by multiplying the length by the width. Then multiply square feet of the greenhouse by seven.
Example—90' wide by 100' long equals 9000 sq. ft. by 7 times equals 63,000. This is the cubic feet per minute (CFM) to exhaust.
2. **Size of Fans to Install:** Refer to the Acme Fan Rating Table to select the size and number of fans required to move air at .1# static pressure.
Example—Four D42H fans will deliver a total of (4x14,200) 64,800 CFM at .1# static pressure.
3. **Square Feet of Aspen Pad Required:** Divide the CFM of air moved by 150 to find the square feet of Aspen pad required.
Example—64,800 CFM divided by 150 equals 432 sq. ft. of Aspen Pad required.
4. **Amount of water to circulate through pad:** Recent findings have shown that the pad should be thoroughly saturated, and water requirements should

be figured at one-fourth to one-half gallon per minute for every lineal foot of pad.

5. **Aspen Padding:** Specially designed greenhouse Aspen Pad, called "Floral-Air" is available to give the least resistance to moving air yet thoroughly saturates the air with water. It is made with coarser aspen fibers with less density and is covered with wider mesh cloth.
6. **Recirculating Pumps:** A pump should be used that will deliver enough water to thoroughly saturate the Aspen Padding. A pump that will deliver about 50 GPM against a 5 foot head is satisfactory for most installations.
7. **Drip Conductors and Gutters:** A 5" half-round, slip joint gutter which comes in 10' sections with holes drilled at 2" centers and 3/32" or 1/8" in diameter work satisfactory as drip conductors. A plain 5" half-round gutter should be used under the Aspen Pad to carry off the excess water to the sump to be recirculated.
8. **Aspen Pad Supports:** A specially designed rack to hold given sizes of pads will be available. Pads must be replaced after six months of use so a pad holder will greatly increase the ease of replacement.
9. **Costs:** The total installation cost for cooling greenhouses will be between 10 and 12 cents per sq. ft. of ground area covered.

Year-Around Flowering of Chrysanthemums

For the past decade we have seen cut chrysanthemums on the markets every month of the year. To assure high quality cut flowers the plants must be grown under optimum conditions. By optimum conditions we refer particularly to the basic conditions of a good soil, the disease-free condition of the plant material, the absence of any checks in growth from stock plant to the mature flowering plant, adequate means of temperature control for all stages of growth and the selection of the right varieties out of each group for the respective flowering periods. It is with this in mind that we prepare this Manual.

Response Group

Prior to year-around flowering of chrysanthemums, we

referred to varieties as to their natural flowering date. Now that year-around flowering is in general use, we refer to a variety as to its response to short-day treatment. When we say 9 week response, we mean that it will bloom 9 weeks after the short-day treatment is started. A 13-week group requires 13 weeks after short-day treatment is started, and so on with all the other response groups.

Daylength Control

When chrysanthemums are grown around the year, it is very necessary that we know when to apply shade or light to make the plants respond as we desire. The following schedule will give you the proper dates for lighting and shading for each response group.

YEAR-ROUND LIGHTING AND SHADING SCHEDULE

Response Group	Shading to Stop in Fall	Lighting to Start in Fall	Shading to Start in Spring	Lighting to Stop in Spring
7 week	Aug. 27	July 16	Apr. 9	May 28
8 week	Sept. 3	July 23	Apr. 2	May 21
9 week	Sept. 10	July 30	Mar. 26	May 14
10 week	Sept. 17	Aug. 6	Mar. 19	May 7
11 week	Sept. 24	Aug. 13	Mar. 12	Apr. 30
12 week	Oct. 1	Aug. 20	Mar. 5	Apr. 23
13 week	Oct. 8	Aug. 27	Feb. 27	Apr. 16
14 week	Oct. 15	Sept. 3	Feb. 20	Apr. 9

Lighting

To prevent formation of flower buds, the light intensity must be 10 foot-candles.

When lighting an entire house, the lamps should be installed in the ridge of the house. Usually we figure that it requires 1½ watts per sq. ft. of area covered; that includes benches and walks. For smaller installations, the spacing given below will be satisfactory for a bench 42 inches to 48 inches wide:

60-watt lamps in a reflector, spaced 4 feet apart,
2 to 3 feet above the tops of the plants.

100-watt lamps in a reflector, spaced 6 feet apart,
2 to 3 feet above the tops of the plants.

Lights must be used according to the schedule above. It has been found that best results are secured by interrupting the night. Begin lighting at 10 p.m. for the number of hours shown below:

ADDITIONAL LIGHTING SCHEDULE

- 2 Hours during the months of **August, April and May.**
- 3 Hours during the months of **September, October and March.**
- 4 Hours during the months of **November and February.**
- 5 Hours during the months of **December and January.**

Year-Around Flowering of Chrysanthemums

Shading

Use a good durable **Black Cloth** which when applied will reduce the light intensity to 2-foot candles or less. More light intensity than this will result in delayed flowering and unevenness of bloom.

The cloth should be applied at 5 p.m. and removed at 8 a.m. When the temperature is above 90 degrees at 5 p.m. delay the application of the cloth until 6 or 7 p.m. This will reduce the heat under the cloth and yet produce twelve hours or more of night necessary for proper development. Continue covering each evening on pompons until the latest buds show color and most of the flowers are well developed. For large flowering varieties, shading can be discontinued after all flowering buds have attained the diameter of approximately one-half inch.

Be sure that covering is complete on all benches shaded, as any leaks in light will cause uneven spots in the bench at blooming time.

Black cloth should be applied each evening. Missing one night a week will give fair results, but delayed flowering results when cloth is not applied each evening.

Temperature Control

For bud formation, a minimum temperature of 65-65 degrees should be maintained. During the growing period, a night temperature near 60 degrees is ideal, provided the day temperatures are raised to 65 degrees during cloudy weather, or 70 degrees plus when there is direct sunlight. Failure to keep this difference between day and night temperatures has resulted in very uneven flowering response, very similar to low temperature effect. After the color shows, one can drop the temperature to 55 degrees, remembering not to drop the night temperature more than 2 degrees a week.

Excessive high temperatures prohibit the bud development, and during seasons of 90 degree night temperatures, it is suggested that the black cloth be raised after twilight and lowered again in the morning before daylight. This cooler temperature hastens the development of the buds. Air conditioning greenhouses has made it possible to grow chrysanthemums in locations

where natural high temperatures prohibited the development of this crop.

Interrupted Lighting

Interrupted lighting is an interruption of the lighting treatment and should only be used when we are lighting and never when we have to shade with black cloth to finish the crop. Interrupted lighting should be used on 9 and 10 week response varieties and only when flowering during the winter months.

An interrupted lighting treatment of 12 short days, 10 long days, then short days to flowering has made it possible to improve the quality of pompons by improving the spray formation. This same treatment can be used on certain standard varieties where quality is poor because of open centers. The short day treatment should be long enough to initiate the buds before long days are applied. Best to try interrupted lighting on a limited scale until you know how to handle this treatment.

Selection of Varieties

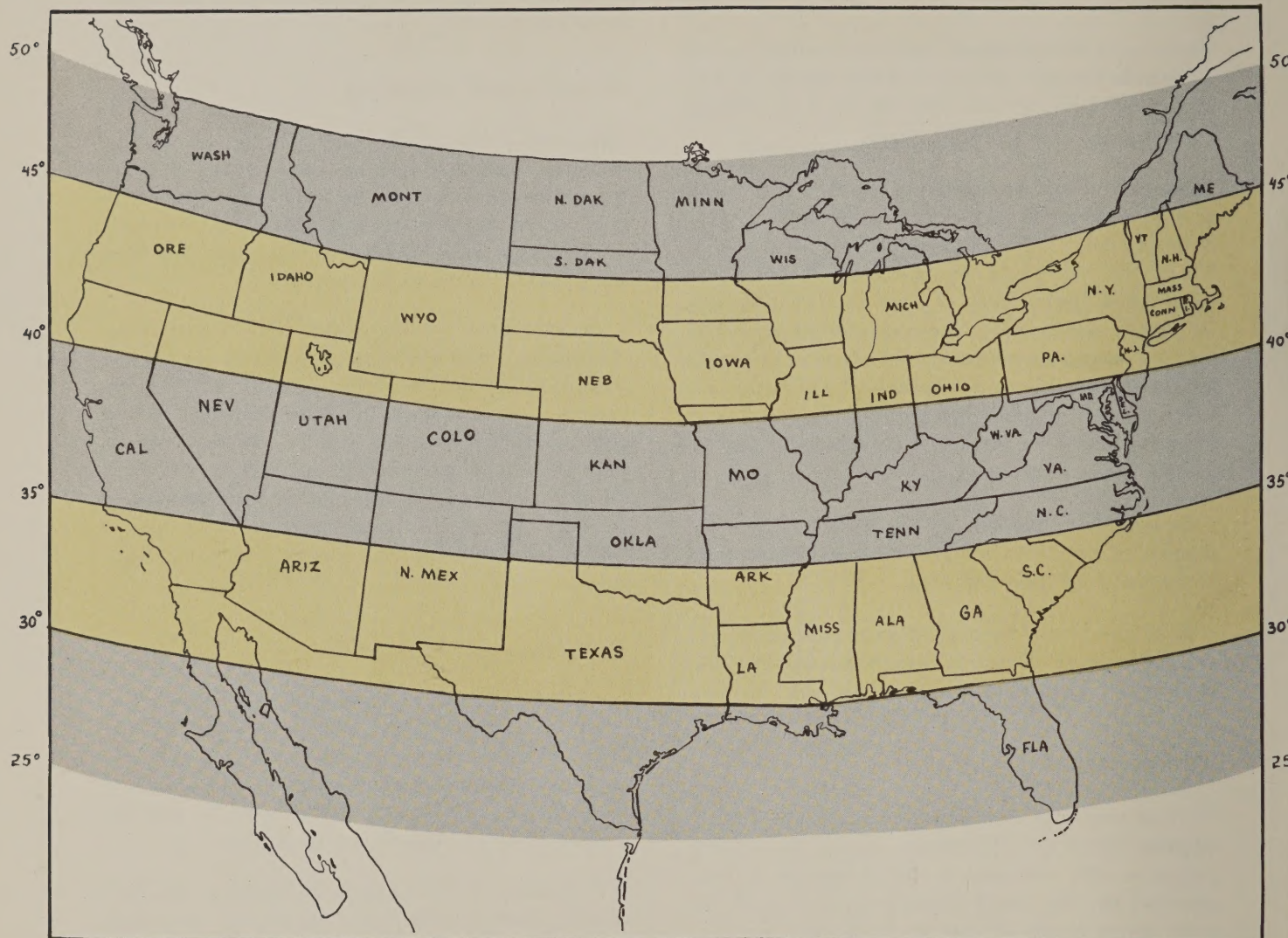
The careful selection of varieties in year-around flowering is very important. An intimate knowledge of varieties will eliminate the pitfalls associated with this crop. Knowing how to select varieties on the basis of response groups is equally as important as selecting varieties that will respond out of season.

In latitudes where seasons, temperature and light conditions are variable, it is to any grower's advantage that he grow only those varieties that will provide the highest yields and best quality for each period of the year.

The South is of course more fortunate in that light duration there and intensity fluctuates less than is experienced in the North, and even though only three or four response groups are used during a 52-week period, the need for meticulous varietal planning is just as important as it is for any one period in the North.

Your *Gloeckner* representative is well equipped to furnish you the details and the proper varieties for each particular flowering date. His intimate knowledge will eliminate the guess work associated with mum programming.

Year-Around Flowering of Chrysanthemums



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THE MAP ABOVE WILL ASSIST YOU IN LOCATING THE LATITUDE IN WHICH YOUR GREENHOUSE IS LOCATED. YOU NEED THIS INFORMATION TO USE THE FLOWERING SCHEDULES THAT FOLLOW ON THE NEXT PAGES.

Year-Around Chrysanthemum Flowering Schedule

BLOOM JANUARY 7, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Aug. 13	Sept. 3	Sept. 3 —Oct. 1	no	14 Week
			Aug. 27—Oct. 8	no	13 Week
			Aug. 20—Oct. 15	no	12 Week
			Aug. 13—Oct. 22	no	11 Week
			Aug. 13—Oct. 29	no	10 Week
35-40°	Aug. 20	Sept. 10	Sept. 3 —Oct. 1	no	14 Week
			Aug. 27—Oct. 8	no	13 Week
			Aug. 20—Oct. 15	no	12 Week
			Aug. 20—Oct. 22	no	11 Week
			Aug. 20—Oct. 29	no	10 Week
30-35°	Aug. 27	Sept. 17	Aug. 27—Oct. 8	no	13 Week
			Aug. 27—Oct. 15	no	12 Week
			Aug. 27—Oct. 22	no	11 Week
			Aug. 27—Oct. 29	no	10 Week
25-30°	Sept. 3	Sept. 24	Sept. 3 —Oct. 15	no	12 Week
			Sept. 3 —Oct. 22	no	11 Week
			Sept. 3 —Oct. 29	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga Wh. Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Silvercrest Monarch	Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Corsair Gold. Acclaim Yel. Acclaim Yel. Satellite Goldie	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Beauregard Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma
PINK	S		Pink Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Dk. Orch. Queen Orchid Queen
	P	Alvoda Riviera Rosalind	Debutante	Heritage	Almega Taffeta

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM JANUARY 14, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Aug. 13	Sept. 3	Sept. 3 —Oct. 8	no	14 Week
			Aug. 27—Oct. 15	no	13 Week
			Aug. 20—Oct. 22	no	12 Week
			Aug. 13—Oct. 29	no	11 Week
			Aug. 13—Nov. 5	no	10 Week
35-40°	Aug. 20	Sept. 10	Sept. 3 —Oct. 8	no	14 Week
			Aug. 27—Oct. 15	no	13 Week
			Aug. 20—Oct. 22	no	12 Week
			Aug. 20—Oct. 29	no	11 Week
			Aug. 20—Nov. 5	no	10 Week
30-35°	Aug. 27	Sept. 17	Aug. 27—Oct. 15	no	13 Week
			Aug. 27—Oct. 22	no	12 Week
			Aug. 27—Oct. 29	no	11 Week
			Aug. 27—Nov. 5	no	10 Week
25-30°	Sept. 3	Sept. 24	Sept. 3 —Oct. 22	no	12 Week
			Sept. 3 —Oct. 29	no	11 Week
			Sept. 3 —Nov. 5	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga Wh. Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Silvercrest Monarch	Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Corsair Gold. Acclaim Yel. Acclaim Yel. Satellite Goldie	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Beaureg'rd Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma Or. Beauregard Rubicon Br. Masterp'ce
PINK	S		Pink Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Dk. Orch. Queen Orchid Queen
	P	Alvoda Riviera Rosalind	Debutante	Heritage	Almega Taffeta Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM JANUARY 21, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Aug. 20	Sept. 10	Sept. 3 —Oct. 15	no	14 Week
			Aug. 27—Oct. 22	no	13 Week
			Aug. 20—Oct. 29	no	12 Week
			Aug. 20—Nov. 5	no	11 Week
			Aug. 20—Nov. 12	no	10 Week
35-40°	Aug. 27	Sept. 17	Sept. 3 —Oct. 15	no	14 Week
			Aug. 27—Oct. 22	no	13 Week
			Aug. 27—Oct. 29	no	12 Week
			Aug. 27—Nov. 5	no	11 Week
			Aug. 27—Nov. 12	no	10 Week
30-35°	Sept. 3	Sept. 24	Sept. 3 —Oct. 22	no	13 Week
			Sept. 3 —Oct. 29	no	12 Week
			Sept. 3 —Nov. 5	no	11 Week
			Sept. 3 —Nov. 12	no	10 Week
25-30°	Sept. 10	Oct. 1	Sept. 10—Oct. 29	no	12 Week
			Sept. 10—Nov. 5	no	11 Week
			Sept. 10—Nov. 12	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga Wm. Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Acclaim Cotillion Wh. Snowdrop Satellite Yukon	Silvercrest Monarch	Sculpture Paramount Belray Carrara
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Corsair Gold. Acclaim Yel. Acclaim Yel. Satellite Goldie	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Beaureg'rd Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma Or. Beauregard Rubicon Br. Masterp'ce
PINK	S		Pink Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Dk. Orch. Queen Orchid Queen
	P	Alvoda Riviera Rosalind	Debutante	Heritage	Almega Taffeta
					Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM JANUARY 28, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Aug. 27	Sept. 17	Sept. 3 —Oct. 22	no	14 Week
			Aug. 27—Oct. 29	no	13 Week
			Aug. 27—Nov. 5	no	12 Week
			Aug. 27—Nov. 12	no	11 Week
			Aug. 27—Nov. 19	no	10 Week
35-40°	Sept. 3	Sept. 24	Sept. 3 —Oct. 22	no	14 Week
			Sept. 3 —Oct. 29	no	13 Week
			Sept. 3 —Nov. 5	no	12 Week
			Sept. 3 —Nov. 12	no	11 Week
			Sept. 3 —Nov. 19	no	10 Week
30-35°	Sept. 10	Oct. 1	Sept. 10—Oct. 29	no	13 Week
			Sept. 10—Nov. 5	no	12 Week
			Sept. 10—Nov. 12	no	11 Week
			Sept. 10—Nov. 19	no	10 Week
25-30°	Sept. 17	Oct. 8	Sept. 17—Nov. 5	no	12 Week
			Sept. 17—Nov. 12	no	11 Week
			Sept. 17—Nov. 19	no	10 Week
*For No Pinch Method: Plant and Light on Pinch Date					

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga Wm. Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Silvercrest Monarch	Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Param't Gold Ball Lollipop Pippin	Yel. Beaureg'rd Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Galaxy Orange Galaxy Red Heritage	Thelma	Or. Beauregard Rubicon Br. Masterp'ce
PINK	S		Pink Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Dk. Orch. Queen Orchid Queen
	P	Alvoda Riviera Rosalind	Heritage	Almega Taffeta	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 4, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Sept. 3	Sept. 24	Sept. 3 —Oct. 29	no	14 Week
			Sept. 3 —Nov. 5	no	13 Week
			Sept. 3 —Nov. 12	no	12 Week
			Sept. 3 —Nov. 19	no	11 Week
			Sept. 3 —Nov. 26	no	10 Week
35-40°	Sept. 10	Oct. 1	Sept. 10—Nov. 5	no	13 Week
			Sept. 10—Nov. 12	no	12 Week
			Sept. 10—Nov. 19	no	11 Week
			Sept. 10—Nov. 26	no	10 Week
30-35°	Sept. 17	Oct. 8	Sept. 17—Nov. 5	no	13 Week
			Sept. 17—Nov. 12	no	12 Week
			Sept. 17—Nov. 19	no	11 Week
			Sept. 17—Nov. 26	no	10 Week
25-30°	Sept. 24	Oct. 15	Sept. 24—Nov. 12	no	12 Week
			Sept. 24—Nov. 19	no	11 Week
			Sept. 24—Nov. 26	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Acclaim Cotillion Wh. Snowcrop Satellite Yukon	Sculpture Paramount Belray Carrara Highbrow	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Yel. Acclaim Gold. Acclaim Yel. Satellite Goldie Corsair	Yel. Param't Gold Ball Lollipop Pippin Yel. Highbrow	Yel. Beaureg'rd Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma Or. Beauregard Rubicon Br. Masterp'ce
PINK	S				Ind. Pink Dk. Orch. Queen
	P	Alvoda Riviera Rosalind	Debutante	Heritage Almega Taffeta	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 11, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Sept. 10	Oct. 1	Sept. 10—Nov. 5	no	14 Week
			Sept. 10—Nov. 12	no	13 Week
			Sept. 10—Nov. 19	no	12 Week
			Sept. 10—Nov. 26	no	11 Week
			Sept. 10—Dec. 3	no	10 Week
35-40°	Sept. 17	Oct. 8	Sept. 17—Nov. 12	no	13 Week
			Sept. 17—Nov. 19	no	12 Week
			Sept. 17—Nov. 26	no	11 Week
			Sept. 17—Dec. 3	no	10 Week
30-35°	Sept. 24	Oct. 15	Sept. 24—Nov. 12	no	13 Week
			Sept. 24—Nov. 19	no	12 Week
			Sept. 24—Nov. 26	no	11 Week
			Sept. 24—Dec. 3	no	10 Week
25-30°	Oct. 8	Oct. 29	Oct. 8—Nov. 19	no	12 Week
			Oct. 8—Nov. 26	no	11 Week
			Oct. 8—Dec. 3	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap Wh. Riviera	Acclaim Cotillion Wh. Snowcrop Satellite Yukon	Sculpture Paramount Belray Carrara Highbrow	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S		Dk. Yel. Chaf'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yel. Snowcrest Shamrock Vibrant Yel. Riviera	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Param't Gold Ball Lollipop Pippin Yel. Highbrow	Yel. Beaureg'rd Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S		Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P	Merrymaker Topaz Br. Riviera	Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma Or. Beauregard Rubicon Br. Masterp'ce
PINK	S				Ind. Pink Dk. Orch. Queen
	P	Alvoda Riviera Rosalind	Debutante	Heritage Almega Taffeta	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 18, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Sept. 17	Oct. 8	Sept. 17—Nov. 19	no	13 Week
			Sept. 17—Nov. 26	no	12 Week
			Sept. 17—Dec. 3	no	11 Week
			Sept. 17—Dec. 10	no	10 Week
35-40°	Sept. 24	Oct. 15	Sept. 24—Nov. 19	no	13 Week
			Sept. 24—Nov. 26	no	12 Week
			Sept. 24—Dec. 3	no	11 Week
			Sept. 24—Dec. 10	no	10 Week
30-35°	Oct. 8	Oct. 29	Oct. 8—Nov. 19	no	13 Week
			Oct. 8—Nov. 26	no	12 Week
			Oct. 8—Dec. 3	no	11 Week
			Oct. 8—Dec. 10	no	10 Week
25-30°	Oct. 15	Nov. 5	Oct. 15—Nov. 26	no	12 Week
			Oct. 15—Dec. 3	no	11 Week
			Oct. 15—Dec. 10	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P Acclaim Cotillion Wh. Snowcrop Satellite Yukon	Silvercrest	Sculpture Paramount Belray Carrara Highbrow	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S	Dk. Yel. Chattan'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P Yellow Acclaim Golden Acclaim Yellow Satellite Goldie Corsair	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Paramount Gold Ball Lollipop Pippin Yel. Highbrow	Yel. Beauregard Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S	Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma	Or. Beauregard Rubicon Br. Masterpiece
PINK	S			Ind. Pink Dk. Orch. Queen
	P Debutante	Heritage	Almega Taffeta	Portrail Criterion Masterpiece Bluechip Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM FEBRUARY 25, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Sept. 24	Oct. 15	Sept. 24—Nov. 26	no	13 Week
			Sept. 24—Dec. 3	no	12 Week
			Sept. 24—Dec. 10	no	11 Week
			Sept. 24—Dec. 17	no	10 Week
35-40°	Oct. 1	Oct. 22	Oct. 1 —Dec. 3	no	12 Week
			Oct. 1 —Dec. 10	no	11 Week
			Oct. 1 —Dec. 17	no	10 Week
30-35°	Oct. 15	Nov. 5	Oct. 15—Dec. 3	no	12 Week
			Oct. 15—Dec. 10	no	11 Week
			Oct. 15—Dec. 17	no	10 Week
25-30°	Oct. 22	Nov. 12	Oct. 22—Dec. 3	no	12 Week
			Oct. 22—Dec. 10	no	11 Week
			Oct. 22—Dec. 17	no	10 Week
*For No Pinch Method: Plant and Light on Pinch Date					

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chaffanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P Acclaim Cotillion Wh. Snowcrop Satellite Yukon	Silvercrest	Sculpture Paramount Belray Carrara Highbrow	Whitetop Illini Igloo Shasta Cream Shasta
YELLOW	S	Dk. Yel. Chat'n'ga Yel. Chaffanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P Yellow Acclaim Golden Accaim Yellow Satellite Goldie Corsair	Yellow Galaxy Illini Wampum Omega Gold Medal	Yel. Paramount Gold Ball Lollipop Pippin Yellow Highbrow	Yel. Beauregard Yellow Igloo Yellow Shasta Brigadoon Jealousy
BRONZE & RED	S	Oak Leaf	Calvert's Gold	Ind Bronze Ind. Apricot Br. Orchid Queen
	P Christmas Star Holiday Mahog. Viking	Galaxy Orange Galaxy Red Heritage	Thelma	Or. Beauregard Rubicon Br. Masterpiece
PINK	S			Ind. Pink Dk. Orch. Queen
	P Debutante	Heritage	Almega Taffeta	Portrait Criterion Masterpiece Bluechip Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MARCH 4, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Oct. 1	Oct. 22	Oct. 1 —Dec. 3	no	13 Week
			Oct. 1 —Dec. 10	no	12 Week
			Oct. 1 —Dec. 17	no	11 Week
			Oct. 1 —Dec. 24	no	10 Week
35-40°	Oct. 15	Nov. 5	Oct. 15—Dec. 10	no	12 Week
			Oct. 15—Dec. 17	no	11 Week
			Oct. 15—Dec. 24	no	10 Week
30-35°	Oct. 22	Nov. 12	Oct. 22—Dec. 10	no	12 Week
			Oct. 22—Dec. 17	no	11 Week
			Oct. 22—Dec. 24	no	10 Week
25-30°	Oct. 29	Nov. 19	Oct. 29—Dec. 10	no	12 Week
			Oct. 29—Dec. 17	no	11 Week
			Oct. 29—Dec. 24	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P Acclaim Cotillion Wh. Snowdrop Yukon Satellite	Silvercrest Illini Peace	White Taffeta Sculpture Paramount Belray Carrara	Whiteto Illini Igloo Shasta Cream Shasta Wh. Memorial
YELLOW	S	Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P Yellow Acclaim Golden Acclaim Yellow Satellite Goldie Corsair	Illini Wampum Omega Gold Medal Yellow Galaxy	Yel. Sculpture Gold Ball Lollipop Pippin Yel. Paramount Sultan	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo
BRONZE & RED	S	Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orch. Queen
	P Holiday Christmas Star	Red Heritage Galaxy Orange Galaxy	Thelma Olnura	Or. Beauregard Beauregard Rubicon Climax
PINK	S			Ind. Pink Dk. Orch. Queen Orchid Queen
	P Debutante	Heritage Illini Roseglow	Almega Taffeta Delmar	Bluechip Portrait Criterion Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MARCH 11, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Oct. 8	Oct. 29	Oct. 8 —Dec. 10	no	13 Week
			Oct. 8 —Dec. 17	no	12 Week
			Oct. 8 —Dec. 24	no	11 Week
			Oct. 8 —Dec. 31	no	10 Week
35-40°	Oct. 22	Nov. 12	Oct. 22—Dec. 17	no	12 Week
			Oct. 22—Dec. 24	no	11 Week
			Oct. 22—Dec. 31	no	10 Week
30-35°	Oct. 29	Nov. 19	Oct. 29—Dec. 17	no	12 Week
			Oct. 29—Dec. 24	no	11 Week
			Oct. 29—Dec. 31	no	10 Week
25-30°	Nov. 5	Nov. 26	Nov. 5 —Dec. 17	no	12 Week
			Nov. 5 —Dec. 24	no	11 Week
			Nov. 5 —Dec. 31	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		13 Week	12 Week	11 Week	10 Week
WHITE	S		Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Acclaim Cotillion Wh. Snowdrop Yukon Satellite	Silvercrest Illini Peace	White Taffeta Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta Wh. Memorial
YELLOW	S		Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yellow Acclaim Golden Acclaim Yellow Satellite Goldie Corsair	Illini Wampum Omega Gold Medal Yellow Galaxy	Yel. Sculpture Gold Ball Lollipop Pippin Yel. Paramount Sultan	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo
BRONZE & RED	S		Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orchid Queen
	P	Holiday Christmas Star	Red Heritage Galaxy Orange Galaxy	Thelma Olnura	Or. Beauregard Beauregard Rubicon Climax
PINK	S				Ind. Pink Dk. Orch. Queen Orchid Queen
	P	Debutante	Heritage Illini Roseglow	Almega Taffeta Delmar	Bluechip Portrait Criterion Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MARCH 18, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Oct. 15	Nov. 5	Oct. 15—Dec. 24	no	12 Week
			Oct. 15—Dec. 31	no	11 Week
			Oct. 15—Jan. 7	no	10 Week
35-40°	Oct. 29	Nov. 19	Oct. 29—Dec. 24	no	12 Week
			Oct. 29—Dec. 31	no	11 Week
			Oct. 29—Jan. 7	no	10 Week
30-35°	Nov. 5	Nov. 26	Nov. 5 —Dec. 24	no	12 Week
			Nov. 5 —Dec. 31	no	11 Week
			Nov. 5 —Jan. 7	no	10 Week
25-30°	Nov. 19	Dec. 10	Nov. 19—Dec. 24	no	12 Week
			Nov. 19—Dec. 31	no	11 Week
			Nov. 19—Jan. 7	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Silvercrest Illini Peace	White Taffeta Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta Wh. Memorial
YELLOW	S	Dk. Yl. Chattan'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P	Illini Wampum Omega Gold Medal Yellow Galaxy	Yel. Sculpture Gold Ball Lollipop Pippin Yel. Paramount Sultan	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo
BRONZE & RED	S	Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orchid Queen
	S	Red Heritage Galaxy Orange Galaxy	Thelma Olnura	Or. Beauregard Beauregard Rubicon Climax
PINK	S			Ind. Pink Dk. Orchid Queen Orchid Queen
	P	Heritage Illini Roseglow	Almega Taffeta Delmar	Bluechip Portrait Criterion Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MARCH 25, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Oct. 22	Nov. 12	Oct. 22—Dec. 31	no	12 Week
			Oct. 22—Jan. 7	no	11 Week
			Oct. 22—Jan. 14	no	10 Week
35-40°	Nov. 5	Nov. 26	Nov. 5 —Dec. 31	no	12 Week
			Nov. 5 —Jan. 7	no	11 Week
			Nov. 5 —Jan. 14	no	10 Week
30-35°	Nov. 12	Dec. 3	Nov. 12—Dec. 31	no	12 Week
			Nov. 12—Jan. 7	no	11 Week
			Nov. 12—Jan. 14	no	10 Week
25-30°	Nov. 26	Dec. 17	Nov. 26—Dec. 31	no	12 Week
			Nov. 26—Jan. 7	no	11 Week
			Nov. 26—Jan. 14	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Silvercrest Illini Peace	White Taffeta Sculpture Paramount Belray Carrara	Whitetop Illini Igloo Shasta Cream Shasta Wh. Memorial
YELLOW	S	Dk. Yl. Chattan'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P	Illini Wampum Omega Gold Medal Yellow Galaxy	Yel. Sculpture Gold Ball Lollipop Pippin Yel. Paramount Sultan	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo
BRONZE & RED	S	Oak Leaf	Calvert's Gold	Ind. Bronze Ind. Apricot Br. Orchid Queen
	P	Red Heritage Galaxy Orange Galaxy	Thelma Olnura	Or. Beauregard Beauregard Rubicon Climax
PINK	S			Ind. Pink Dk. Orchid Queen Orchid Queen
	P	Heritage Illini Roseglow	Almega Taffeta Delmar	Bluechip Portrait Criterion Pennant Memorial

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM APRIL 1, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Nov. 5	Nov. 26	Nov. 5 —Jan. 14	no	11 Week
			Nov. 5 —Jan. 21	no	10 Week
35-40°	Nov. 12	Dec. 10	Nov. 12—Jan. 14	no	11 Week
			Nov. 12—Jan. 21	no	10 Week
30-35°	Nov. 26	Dec. 17	Nov. 26—Jan. 14	no	11 Week
			Nov. 26—Jan. 21	no	10 Week
25-30°	Dec. 3	Dec. 24	Dec. 3 —Jan. 14	no	11 Week
			Dec. 3 —Jan. 21	no	10 Week
			Dec. 3 —Jan. 28	no	9 Week
			Dec. 3 —Feb. 4	no	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	S Cream Mefo Mefo	Ind. White Crystal Queen	Queen's Lace	
	P Wh. Taffeta Sculpture Paramount Belray Carrara	Whitetop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta	Keepsake White Keepsake Vesta Silver Cloud Halo Cream Halo Alaska	Pristine Blizzard
YELLOW	S Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	
	P Yel. Sculpture Gold Ball Lollipop Pippin Sultan Yel. Paramount	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo	Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Starbright	
BRONZE & RED	S Calvert's Gold	Ind. Bronze Br. Orchid Queen Nomago	Detroit News	
	P Thelma Olnura	Or. Beauregard Beauregard Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Orchid Queen		
	S Taffeta Almega Delmar	Delight Portrait Criterion Bonnie Pennant Masterpiece Celebration	Pinkette Reward Pink Dot Bluechip Reveille Tempo	Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM APRIL 8, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Nov. 12	Dec. 3	Nov. 12—Jan. 21 Nov. 12—Jan. 28	Mar. 11 no	11 Week 10 Week
35-40°	Nov. 19	Dec. 10	Nov. 19—Jan. 21 Nov. 19—Jan. 28	Mar. 11 no	11 Week 10 Week
30-35°	Dec. 3	Dec. 31	Dec. 3 —Jan. 21 Dec. 3 —Jan. 28 Dec. 3 —Feb. 4	Mar. 11 no no	11 Week 10 Week 9 Week
25-30°	Dec. 17	Jan. 7	Dec. 17—Jan. 21 Dec. 17—Jan. 28 Dec. 17—Feb. 4 Dec. 17—Feb. 11	Mar. 11 no no no	11 Week 10 Week 9 Week 8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	S Cream Mefo Mefo	Ind. White Crystal Queen	Queen's Lace	
	P Wh. Taffeta Sculpture Paramount Belray Carrara	Whitop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta	Keepsake White Keepsake Vesta Silver Cloud Halo Cream Halo Alaska	Pristine Blizzard
YELLOW	S Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	
	P Yel. Sculpture Gold Ball Lollipop Pippin Sultan Yel. Paramount	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo	Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Starbright	
BRONZE & RED	S Calvert's Gold	Ind. Bronze Br. Orchid Queen Nomago	Detroit News	
	P Thelma Olnura	Or. Beauregard Beauregard Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Orchid Queen		
	P Taffeta Almega Delmar	Delight Portrait Criterion Bonnie Pennant Masterpiece Celebration	Pinkette Reward Pink Dot Bluechip Reveille Tempo	Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM APRIL 15, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Nov. 19	Dec. 17	Nov. 19—Jan. 28 Nov. 19—Feb. 4	Mar. 11 Mar. 18	11 Week 10 Week
35-40°	Dec. 3	Dec. 31	Dec. 3 —Jan. 28 Dec. 3 —Feb. 4 Dec. 3 —Feb. 11	Mar. 11 Mar. 18 Mar. 25	11 Week 10 Week 9 Week
30-35°	Dec. 10	Jan. 7	Dec. 10—Feb. 4 Dec. 10—Feb. 11 Dec. 10—Feb. 18	Mar. 11 Mar. 18 Mar. 25	11 Week 10 Week 9 Week
25-30°	Dec. 24	Jan. 14	Dec. 24—Feb. 4 Dec. 24—Feb. 11 Dec. 24—Feb. 18	Mar. 11 Mar. 18 Mar. 25	11 Week 10 Week 9 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	S Cream Mefo Mefo	Ind. White Crystal Queen	Queen's Lace	
	P Wh. Taffeta Sculpture Paramount Belray Carrara	Whitetop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta	Keepsake White Keepsake Vesta Silver Cloud Halo Cream Halo Alaska	Pristine Blizzard
YELLOW	S Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	
	P Yel. Sculpture Gold Ball Lollipop Pippin Sulfan Yel. Paramount	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo	Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Starbright	
BRONZE & RED	S Calvert's Gold	Ind. Bronze Br. Orchid Queen Nomago	Detroit News	
	P Thelma Olnura	Or. Beauregard Beauregard Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Orchid Queen		
	P Taffeta Almega Delmar	Delight Portrait Criterion Bonnie Pennant Masterpiece Celebration	Pinkette Reward Pink Dot Bluechip Reveille Tempo	Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM APRIL 22, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Nov. 26	Dec. 24	Nov. 26—Feb. 4	Mar. 11	11 Week
			Nov. 26—Feb. 11	Mar. 18	10 Week
			Nov. 26—Feb. 18	Mar. 25	9 Week
35-40°	Dec. 10	Jan. 7	Dec. 10—Feb. 4	Mar. 11	11 Week
			Dec. 10—Feb. 11	Mar. 18	10 Week
			Dec. 10—Feb. 18	Mar. 25	9 Week
30-35°	Dec. 17	Jan. 14	Dec. 17—Feb. 11	Mar. 18	10 Week
			Dec. 17—Feb. 18	Mar. 25	9 Week
			Dec. 17—Feb. 25	Apr. 1	8 Week
25-30°	Dec. 31	Jan. 21	Dec. 31—Feb. 11	Mar. 18	10 Week
			Dec. 31—Feb. 18	Mar. 25	9 Week
			Dec. 31—Feb. 25	Apr. 1	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		11 Week	10 Week	9 Week	8 Week
WHITE	S	Cream Mefo Mefo	Ind. White Crystal Queen	Queen's Lace	
	P	Wh. Taffeta Sculpture Paramount Belray Carrara	Whitotop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta	Keepsake White Keepsake Vesta Silver Cloud Halo Cream Halo Alaska	Pristine Blizzard
YELLOW	S	Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	
	P	Yel. Sculpture Gold Ball Lollipop Pippin Sultan Yel. Paramount	Yel. Beauregard Yellow Shasta Jealousy Yellow Igloo	Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Starbright	
BRONZE & RED	S	Calvert's Gold	Ind. Bronze Br. Orchid Queen Nomago	Detroit News	
	P	Thelma Olnura	Or. Beauregard Beauregard Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Talisman Paradise
PINK	S		Ind. Pink Dk. Orchid Queen Orchid Queen		
	P	Taffeta Almega Delmar	Delight Portrait Criterion Bonnie Pennant Masterpiece Celebration	Pinkette Reward Pink Dot Bluechip Reveille Tempo	Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM APRIL 29, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Dec. 10	Jan. 7	Dec. 10—Feb. 18	Mar. 18	10 Week
			Dec. 10—Feb. 25	Mar. 25	9 Week
			Dec. 10—Mar. 3	Apr. 1	8 Week
35-40°	Dec. 17	Jan. 14	Dec. 17—Feb. 18	Mar. 18	10 Week
			Dec. 17—Feb. 25	Mar. 25	9 Week
			Dec. 17—Mar. 3	Apr. 1	8 Week
30-35°	Dec. 24	Jan. 21	Dec. 24—Feb. 18	Mar. 18	10 Week
			Dec. 24—Feb. 25	Mar. 25	9 Week
			Dec. 24—Mar. 3	Apr. 1	8 Week
25-30°	Jan. 7	Jan. 28	Jan. 7—Feb. 18	Mar. 18	10 Week
			Jan. 7—Feb. 25	Mar. 25	9 Week
			Jan. 7—Mar. 3	Apr. 1	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Ind. White Crystal Queen	Queen's Lace	Silver Sheen
	P Whitetop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	Blazing Gold
	P Yellow Beauregard Luxury Yellow Shasta Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Honeymoon	
BRONZE & RED	S Ind. Bronze Nomago	Detroit News	
	P Jetfire Or. Beauregard Beauregard Rubicon Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	S Ind. Pink Dk. Orchid Queen Orchid Queen	Mary Garden	
	P Parisienne Delight Criterion Bonnie Pennant Portrait Masterpiece Celebration	Pinkette Vogue Reward Pink Dot Bluechip Tempo Reveille	Mayfair Enterprise Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MAY 6, 1957

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Dec. 17	Jan. 14	Dec. 17—Feb. 25	Mar. 18	10 Week
			Dec. 17—Mar. 3	Mar. 25	9 Week
			Dec. 17—Mar. 10	Apr. 1	8 Week
35-40°	Dec. 24	Jan. 21	Dec. 24—Feb. 25	Mar. 18	10 Week
			Dec. 24—Mar. 3	Mar. 25	9 Week
			Dec. 24—Mar. 10	Apr. 1	8 Week
30-35°	Dec. 31	Jan. 28	Dec. 31—Feb. 25	Mar. 18	10 Week
			Dec. 31—Mar. 3	Mar. 25	9 Week
			Dec. 31—Mar. 10	Apr. 1	8 Week
25-35°	Jan. 14	Feb. 4	Jan. 14—Feb. 25	Mar. 18	10 Week
			Jan. 14—Mar. 3	Mar. 25	9 Week
			Jan. 14—Mar. 10	Apr. 1	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		10 Week	9 Week	8 Week
WHITE	S	Ind. White Crystal Queen	Queen's Lace	Silver Sheen
	P	Whitop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	Blazing Gold
	P	Yellow Beauregard Luxury Yellow Shasta Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Honeymoon	
BRONZE & RED	S	Ind. Bronze Nomago	Detroit News	
	P	Jetfire Or. Beauregard Beauregard Rubicon Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Orchid Queen	Mary Garden	
	P	Parisienne Delight Criterion Bonnie Pennant Portrait Masterpiece Celebration	Pinkette Vogue Reward Pink Dot Bluechip Tempo Reveille	Mayfair Enterprise Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MAY 14, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Jan. 2	Jan. 30	Jan. 2 —Mar. 5	Mar. 19	10 Week
			Jan. 2 —Mar. 12	Mar. 26	9 Week
			Jan. 2 —Mar. 19	Apr. 2	8 Week
35-40°	Jan. 9	Feb. 6	Jan. 9 —Mar. 5	Mar. 19	10 Week
			Jan. 9 —Mar. 12	Mar. 26	9 Week
			Jan. 9 —Mar. 19	Apr. 2	8 Week
25-35°	Jan. 23	Feb. 13	Jan. 23—Mar. 5	Mar. 19	10 Week
			Jan. 23—Mar. 12	Mar. 26	9 Week
			Jan. 23—Mar. 15	Apr. 2	8 Week

BLOOM MAY 21, 1956

40-45°	Jan. 9	Feb. 6	Jan. 9 —Mar. 12	Mar. 19	10 Week
			Jan. 9 —Mar. 19	Mar. 26	9 Week
			Jan. 9 —Mar. 26	Apr. 2	8 Week
35-40°	Jan. 16	Feb. 13	Jan. 16—Mar. 12	Mar. 19	10 Week
			Jan. 16—Mar. 19	Mar. 26	9 Week
			Jan. 16—Mar. 26	Apr. 2	8 Week
25-35°	Jan. 30	Feb. 20	Jan. 30—Mar. 12	Mar. 19	10 Week
			Jan. 30—Mar. 19	Mar. 26	9 Week
			Jan. 30—Mar. 26	Apr. 2	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Ind. White Crystal Queen	Queen's Lace	Silver Sheen
	P Whitetop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	Blazing Gold
	P Yellow Beauregard Luxury Yellow Shasta Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Honeymoon	
BRONZE & RED	S Ind. Bronze Nomago	Detroit News	
	P Jeffire Or. Beauregard Beauregard Rubicon Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	S Ind. Pink Dk. Orchid Queen Orchid Queen	Mary Garden	
	P Parisienne Delight Criterion Bonnie Pennant Portrait Masterpiece Celebration	Pinkette Vogue Reward Pink Dot Bluechip Tempo Reveille	Mayfair Enterprise Mirth Prelude

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM MAY 28, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Jan. 23	Feb. 20	Jan. 23—Mar. 19	Mar. 19	10 Week
			Jan. 23—Mar. 26	Mar. 26	9 Week
			Jan. 23—Apr. 2	Apr. 2	8 Week
25-40°	Feb. 6	Feb. 27	Feb. 6—Mar. 19	Mar. 19	10 Week
			Feb. 6—Mar. 26	Mar. 26	9 Week
			Feb. 6—Apr. 2	Apr. 2	8 Week

BLOOM JUNE 4, 1956

40-45°	Jan. 30	Feb. 27	Jan. 30—Mar. 26	Mar. 26	10 Week
			Jan. 30—Apr. 2	Apr. 2	9 Week
			Jan. 30—Apr. 9	Apr. 9	8 Week
25-40°	Feb. 13	Mar. 6	Feb. 13—Mar. 26	Mar. 26	10 Week
			Feb. 13—Apr. 2	Apr. 2	9 Week
			Feb. 13—Apr. 9	Apr. 9	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		10 Week	9 Week	8 Week
WHITE	S	Ind. White Crystal Queen	Queen's Lace	Silver Sheen
	P	Whitetop Iceberg Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial Madonna	White Popcorn Keepsake White Keepsake Pinocchio Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Gold Lace Luyona Good News	Blazing Gold
	P	Yellow Beauregard Luxury Yellow Shasta Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Honeymoon	
BRONZE & RED	S	Ind. Bronze Nomago	Detroit News	
	P	Jetfire Or. Beauregard Beauregard Rubicon Climax Amberhue	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	S	Ind. Pink Dk. Orchid Queen Orchid Queen	Mary Garden	
	P	Parisienne Delight Criterion Bonnie Pennant Portrait Masterpiece Celebration	Pinkette Vogue Reward Pink Dot Bluechip Tempo Reveille	Mayfair Enterprise Mirth Prelude

Year-Around Chrysanthemum Flowering Schedule

BLOOM JUNE 11, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
25-45°	Feb. 20	Mar. 12	Feb. 20—Apr. 2	Apr. 2	10 Week
			Feb. 20—Apr. 9	Apr. 9	9 Week
			Feb. 20—Apr. 16	Apr. 16	8 Week

BLOOM JUNE 18, 1956

25-45°	Feb. 27	Mar. 19	Feb. 27—Apr. 9	Apr. 9	10 Week
			Feb. 27—Apr. 16	Apr. 16	9 Week
			Feb. 27—Apr. 23	Apr. 23	8 Week

BLOOM JUNE 25, 1956

25-45°	Mar. 5	Mar. 26	Mar. 5 —Apr. 16	Apr. 16	10 Week
			Mar. 5 —Apr. 23	Apr. 23	9 Week
			Mar. 5 —Apr. 30	Apr. 30	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross	Queen's Lace Silver Queen Wh. Mary Garden	Silver Sheen
	P Whitetop Iceberg Madonna Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Songster Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S Yellow Queen	Luyona Gold Lace Good News	Blazing Gold
	P Crescendo Yellow Beauregard Yellow Shasta Luxury Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Sunray Honeymoon	
BRONZE & RED	P Jeffire Beauregard Rubicon Butterscotch Climax	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	P Parisienne Delight Portrait Criterion Bonnie Pennant Nobility	Pinkette Vogue Reward Pink Dot Bluechip Tempo	Mayfair Enterprise Mirth

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM JULY 2, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
25-45°	Mar. 12	Apr. 2	Mar. 12—Apr. 23	Apr. 23	10 Week
			Mar. 12—Apr. 30	Apr. 30	9 Week
			Mar. 12—May 7	May 7	8 Week

BLOOM JULY 9, 1956

25-45°	Mar. 19	Apr. 9	Mar. 19—Apr. 30	Apr. 30	10 Week
			Mar. 19—May 7	May 7	9 Week
			Mar. 19—May 14	May 14	8 Week

BLOOM JULY 16, 1956

25-45°	Mar. 26	Apr. 16	Mar. 26—May 7	May 7	10 Week
			Mar. 26—May 14	May 14	9 Week
			Mar. 26—May 21	May 21	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross	Queen's Lace Silver Queen Wh. Mary Garden	Silver Sheen
	P Whitetop Iceberg Madonna Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Songster Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S Yellow Queen	Luyona Gold Lace Good News	Blazing Gold
	P Crescendo Yellow Beauregard Yellow Shasta Luxury Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Sunray Honeymoon	
BRONZE & RED	P Jetfire Beauregard Rubicon Butterscotch Climax	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	P Parisienne Delight Portrait Criterion Bonnie Pennant Nobility	Pinkette Vogue Reward Pink Dot Bluechip Tempo	Mayfair Enterprise Mirth

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM JULY 23, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
25-45°	Apr. 2	Apr. 23	Apr. 2 —May 7	May 14	10 Week
			Apr. 2 —May 14	May 21	9 Week
			Apr. 2 —May 21	May 28	8 Week

BLOOM JULY 30, 1956

25-45°	Apr. 9	Apr. 30	Apr. 9 —May 7	May 21	10 Week
			Apr. 9 —May 14	May 28	9 Week
			Apr. 9 —May 21	June 4	8 Week

BLOOM AUGUST 6, 1956

25-45°	Apr. 16	May 7	Apr. 16—May 7	May 28	10 Week
			Apr. 16—May 14	June 4	9 Week
			Apr. 16—May 21	June 11	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross	Queen's Lace Silver Queen Wh. Mary Garden	Silver Sheen
	P Whitetop Iceberg Madonna Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Songster Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silvertone
YELLOW	S Yellow Queen	Luyona Gold Lace Good News	Blazing Gold
	P Crescendo Yellow Beauregard Yellow Shasta Luxury Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Sunray Honeymoon	
BRONZE & RED	P Jeffire Beauregard Rubicon Butterscotch Climax	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	P Parisienne Delight Portrait Criterion Bonnie Pennant Nobility	Pinkette Vogue Reward Pink Dot Bluechip Tempo	Mayfair Enterprise Mirth

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM AUGUST 13, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
25-45°	Apr. 23	May 14	Apr. 23—May 7	June 4	10 Week
			Apr. 23—May 14	June 11	9 Week
			Apr. 23—May 21	June 18	8 Week

BLOOM AUGUST 20, 1956

25-45°	Apr. 30	May 21	Apr. 30—May 7	June 11	10 Week
			Apr. 30—May 14	June 18	9 Week
			Apr. 30—May 21	June 25	8 Week

BLOOM AUGUST 27, 1956

25-45°	May 7	May 28	No Light Necessary	June 18	10 Week
			No Light Necessary	June 25	9 Week
			No Light Necessary	July 2	8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Giant Betsy Ross	Queen's Lace Silver Queen Wh. Mary Garden	Silver Sheen
	P Whitetop Iceberg Madonna Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn Keepsake White Keepsake Pinocchio Songster Vesta Silver Cloud Halo Cream Halo Alaska	Blizzard Pristine Silverfone
YELLOW	S Yellow Queen	Luyona Gold Lace Good News	Blazing Gold
	P Crescendo Yellow Beauregard Yellow Shasta Luxury Jealousy Yellow Igloo	Goldfinch Starlight Golden Herald Gold Coast Aztec Sunup Sauterne Mary Hall Gondola Yellow Halo Starbright Sunray Honeymoon	
BRONZE & RED	P Jeffire Beauregard Rubicon Butterscotch Climax	Gaiety Bronze Dot Buckskin Sybil	Calumet Talisman Paradise
PINK	P Parisienne Delight Portrait Criterion Bonnie Pennant Nobility	Pinkette Vogue Reward Pink Dot Bluechip Tempo	Mayfair Enterprise Mirth

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM SEPTEMBER 3, 1956

Latitude	Plant	Pinch*	Start Shade	Response Group
25-45°	May 14	June 4	June 25 July 2 July 9	10 Week 9 Week 8 Week

BLOOM SEPTEMBER 10, 1956

25-45°	May 21	June 11	July 2 July 9 July 16	10 Week 9 Week 8 Week
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BLOOM SEPTEMBER 17, 1956

40-45°	May 28	June 18	July 9 July 16 July 23	10 Week 9 Week 8 Week
25-40°	June 4	June 25	July 9 July 16 July 23	10 Week 9 Week 8 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	S Ind. White Giant Betsy Ross Crystal Queen	Silver Queen Queen's Lace Albafross	Silver Sheen
	P Freedom Whitetop Iceberg Madonna Encore Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn White Keepsake Pinocchio Songster Vesta Silver Cloud (Ghs.) Halo (Ghs.) Cream Halo (Ghs.) Seal Gull Alaska	Blizzard Pristine Silvertone
YELLOW	S Ind. Yellow Imp. Ind. Yellow Yellow Queen	Luyona Gold Lace Good News	Blazing Gold
	P Barcarole Crescendo Brigadoon Constellation Yellow Shasta Yellow Beauregard Luxury Jealousy Yellow Igloo	Goldfinch Gold Coast Golden Heald Aztec Sauterne Mary Hall Gondola Yellow Halo (Ghs.) Sunray Honeymoon	
BRONZE & RED	S Ind. Bronze Ind. Apricot Nomago Mrs. Roy	Detroit News	
	P Jeffire Orange Beauregard Beauregard Rubicon Samovar Br. Pandora Climax Paragon Amberhue	Gaiety Bronze Dot Buckskin Buccaneer Navaho Imp. Red Daisy Sybil	Talisman Paradise
PINK	S Ind. Pink Dk. Orchid Queen	Mary Garden	Pink Chief
	P Parisienne Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration	Pinkette Vogue Reward Pink Dot Bluechip Rainbow Tempo Reveille	Mayfair Mary McArthur Mirth

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM SEPTEMBER 24, 1956

Latitude	Plant	Pinch*	Start Shade	Response Group
40-45°	June 4	June 25	July 9	11 Week
			July 16	10 Week
			July 23	9 Week
25-40°	June 11	July 2	July 9	11 Week
			July 16	10 Week
			July 23	9 Week

BLOOM OCTOBER 1, 1956

40-45°	June 11	July 2	July 16	11 Week
			July 23	10 Week
			July 30	9 Week
25-40°	June 18	July 9	July 16	11 Week
			July 23	10 Week
			July 30	9 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		11 Week	10 Week	9 Week
WHITE	S	Mefo Cream Mefo	Ind. White Giant Betsy Ross Crystal Queen	Silver Queen Queen's Lace Albatross
	P	White Taffeta Sculpture Highbrow Paramount Belray	Freedom Whitotop Iceberg Madonna Encore Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn White Keepsake Pinocchio Songster Vesta Silver Cloud (Ghs.) Halo (Ghs.) Cream Halo (Ghs.) Sea Gull Alaska
YELLOW	S	Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Luyona Gold Lace Good News
	P	Yellow Sculpture Golden Chord Forty-Niner Lollipop Pippin Yellow Paramount Gold Ball Sultan Yellow Highbrow Cheerio	Barcarole Crescendo Brigadoon Constellation Yellow Shasta Yellow Beauregard Luxury Jealousy Yellow Igloo	Goldfinch Starlight Gold Coast Golden Herald Aztec Sauterne Mary Hall Gondola Yellow Halo (Ghs.) Sunray Honeymoon
BRONZE & RED	S	Mrs. Eisenhower Calvert's Gold	Ind. Bronze Ind. Apricot Nomago Mrs. Roy	Detroit News
	P	Rusticon Thelma Rubaiyat Illini War Paint Olnura Dk. Bronze Minuet	Jeffire Orange Beauregard Beauregard Rubicon Samovar Br. Pandora Climax Paragon Amberhue	Gaiety Bronze Dot Buckskin Buccaneer Navaho Imp. Red Daisy Sybil
PINK	S		Ind. Pink Dk. Orchid Queen	Mary Garden
	P	Taffeta Delmar Illini Springtime Almega Dk. Pink Minuet Illini Formal	Parisienne Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration	Pinkette Vogue Reward Pink Dot Bluechip Rainbow Tempo Reveille

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM OCTOBER 8, 1956

Latitude	Plant	Pinch*	Start Shade	Response Group
40-45°	June 11	July 2	July 23	11 Week
			July 30	10 Week
			Aug. 6	9 Week
25-40°	June 18	July 9	July 23	11 Week
			July 30	10 Week
			Aug. 6	9 Week

BLOOM OCTOBER 15, 1956

40-45°	June 18	July 9	July 30	11 Week
			Aug. 6	10 Week
			Aug. 13	9 Week
25-40°	June 25	July 16	July 30	11 Week
			Aug. 6	10 Week
			Aug. 13	9 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		11 Week	10 Week	8 Week
WHITE	S	Mefo Cream Mefo	Ind. White Giant Betsy Ross Crystal Queen	Silver Queen Queen's Lace Albatross
	P	White Taffeta Sculpture Highbrow Paramount Belray	Freedom Whitetop Iceberg Madonna Encore Pacesetter Illini Igloo Shasta Cream Shasta Illini Snowdrift White Memorial	White Popcorn White Keepsake Pinocchio Songster Vesta Silver Cloud (Ghs.) Halo (Ghs.) Cream Halo (Ghs.) Sea Gull Alaska
YELLOW	S	Yellow Mefo	Ind. Yellow Imp. Ind. Yellow Yellow Queen	Luyona Gold Lace Good News
	P	Yellow Sculpture Golden Chord Forty-Niner Lollipop Pippin Yellow Paramount Gold Ball Sultan Yellow Highbrow Cheerio	Barcarole Crescendo Brigadoon Constellation Yellow Shasta Yellow Beauregard Luxury Jealousy Yellow Igloo	Goldfinch Starlight Gold Coast Golden Herald Antec Sauferne Mary Hall Gondola Yellow Halo (Ghs.) Sunray Honeymoon
BRONZE & RED	S	Mrs. Eisenhower Calvert's Gold	Ind. Bronze Ind. Apricot Nomago Mrs. Roy	Detroit News
	P	Rusticon Thelma Rubaiyat Illini War Paint Olnura Dark Bronze Minuet	Jetfire Orange Beauregard Beauregard Rubicon Samovar Br. Pandora Climax Paragon Amberhue	Gaiety Bronze Dot Buckskin Buccaneer Navaho Imp. Red Daisy Sybil
PINK	S		Ind. Pink Dk. Orch. Queen	Mary Garden
	P	Taffeta Delmar Illini Springtime Almega Dark Pink Minuet Illini Formal	Parisienne Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration	Pinkette Vogue Reward Pink Dot Bluechip Rainbow Tempo Reveille

Year-Around Chrysanthemum Flowering Schedule

BLOOM OCTOBER 22, 1956

Latitude	Plant	Pinch*	Start Shade	Response Group
40-45°	June 18	July 9	July 30	12 Week
			Aug. 6	11 Week
			Aug. 13	10 Week
			no	9 Week
25-40°	June 25	July 16	July 30	12 Week
			Aug. 6	11 Week
			Aug. 13	10 Week
			no	9 Week

BLOOM OCTOBER 29, 1956

40-45°	June 25	July 16	Aug. 6	12 Week
			Aug. 13	11 Week
			no	10 Week
25-40°	July 2	July 23	Aug. 6	12 Week
			Aug. 13	11 Week
			no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week	9 Week
WHITE	S Chattanooga	Mefo Cream Mefo	Ind. White Giant Betsy Ross Crystal Queen	Silver Queen Queen's Lace Albatross
	P Silvercrest Illini Peace Illini Glacier Fortune	White Taffeta Sculpture Highbrow Priscilla Paramount Belray Carrara	Freedom Whitetop Iceberg Encore Pacesetter Illini Igloo Shasta Dynamo Little America Illini Snowdrift White Memorial	White Popcorn White Keepsake Pinocchio Songster Vesta Sea Gull Alaska
YELLOW	S Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow	Luyona Gold Lace Good News
	P Goldenrod Goldsmith Highlander Illini Wampum Yellow Fortune Omega Yellow Galaxy	Yellow Sculpture Golden Chord Forty Niner Gold Ball Cheerio Yellow Highbrow Lollipop Pippin Sultan	Barcarole Brigadoon Yellow Shasta Yellow Beauregard Luxury Jealousy Yellow Igloo	Starlight Gold Coast Aztec Schn. Yel. Daisy Mary Hall Gondola Sunray Honeymoon
BRONZE & RED	S Oak Leaf	Mrs. Eisenhower Calvert's Gold	Ind. Bronze Ind. Apricot Nomago Mrs. Roy	Detroit News Antique
	P Illini Redwood Br. Goldsmith Galaxy Orange Galaxy	Rusticon Thelma Rubaiyat Illini War Paint Olnura Dk. Bronze Minuet	Jeffire Beauregard Rubicon Samovar Bronze Pandora Climax Paragon Amberhue	Gaiety Bronze Dot Buckskin Buccaneer Navaho Imp. Red Daisy
PINK	S	Calvert's Pink	Ind. Pink Dk. Orch. Queen	Mary Garden
	P Illini Roseglow	Taffeta Illini Springtime Nugano Almega Delmar Dk. Pink Minuet Illini Formal	Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration	Pinkette Vogue Reward Pink Dot Bluechip Rainbow Temno Reveille

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 5, 1956

Latitude	Plant	Pinch*	Start Shade	Response Group
40-45°	July 2	July 23	Aug. 13	12 Week
			Aug. 20	11 Week
			no	10 Week
30-40°	July 9	July 30	Aug. 13	12 Week
			Aug. 20	11 Week
			no	10 Week
25-30°	July 16	Aug. 6	Aug. 13	12 Week
			Aug. 20	11 Week
			no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Giant Betsy Ross Crystal Queen
	P	Silvercrest Illini Peace Illini Glacier Fortune	White Taffeta Sculpture Highbrow Priscilla Paramount Belray Carrara	Freedom Whitetop Iceberg Encore Pacesetter Illini Igloo Shasta Dynamo Little America Illini Snowdrift White Memorial
YELLOW	S	Dk. Yel. Chattan'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P	Goldenrod Goldsmith Highlander Illini Wampum Yellow Fortune Omega Yellow Galaxy	Yellow Sculpture Golden Chord Forty Niner Gold Ball Cheerio Yellow Highbrow Lollipop Pippin Sultan	Barcarole Brigadoon Yellow Shasta Yellow Beauregard Luxury Jealousy Yellow Igloo
BRONZE & RED	S	Oak Leaf	Mrs. Eisenhower Calvert's Gold	Ind. Bronze Ind. Apricot Nomago Mrs. Roy
	P	Illini Redwood Br. Goldsmith Galaxy Orange Galaxy	Rusticon Thelma Rubaiyat Illini War Paint Olnura Dk. Bronze Minuet	Jetfire Beauregard Rubicon Samovar Bronze Pandora Climax Paragon Amberhue
PINK	S		Calvert's Pink	Ind. Pink Dk. Orchid Queen
	P	Illini Roseglow	Taffeta Illini Springtime Nugano Almega Delmar Dk. Pink Minuet Illini Formal	Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 12, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 2	July 23	None	Aug. 20	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 3	no	10 Week
30-40°	July 9	July 30	None	Aug. 20	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 3	no	10 Week
25-30°	July 16	Aug. 6	None	Aug. 20	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 3	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

		12 Week	11 Week	10 Week
WHITE	S	Chattanooga	Mefo Cream Mefo	Ind. White Giant Betsy Ross Crystal Queen
	P	Silvercrest Illini Peace Illini Glacier Fortune	White Taffeta Sculpture Highbrow Priscilla Paramount Belray Carrara	Freedom Whitetop Iceberg Encore Pacesetter Illini Igloo Shasta Illini Snowdrift
YELLOW	S	Dk. Yel. Chattan'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P	Goldenrod Goldsmith Highlander Illini Wampum Yellow Fortune Omega Yellow Galaxy	Yellow Sculpture Golden Chord Forty Niner Gold Ball Cheerio Yellow Highbrow Lollipop Pippin Sultan	Barcarole Brigadoon Yellow Shasta Yellow Beauregard Jealousy Yellow Igloo
BRONZE & RED	S	Oak Leaf	Mrs. Eisenhower Calvert's Gold	Ind. Bronze Ind. Apricot Nomago Mrs. Roy
	P	Illini Redwood Br. Goldsmith Galaxy Orange Galaxy	Rusticon Thelma Rubaiyat Illini War Paint Olnura Dk. Bronze Minuet	Jeffire Beauregard Rubicon Samovar Bronze Pandora Climax Paragon Amberhue
PINK	S		Calvert's Pink	Ind. Pink Dk. Orchid Queen
	P	Illini Roseglow	Taffeta Illini Springtime Nugano Almega Delmar Dk. Pink Minuet Illini Formal	Delight Portrait Bonnie Pennant Nobility Pandora Scintillation Celebration

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 19, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 9	July 30	None	Aug. 20	13 Week
			None	Aug. 13	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 10	no	10 Week
30-40°	July 16	Aug. 6	None	Aug. 20	13 Week
			None	Aug. 15	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 10	no	10 Week
25-30°	July 23	Aug. 13	None	Aug. 20	13 Week
			None	Aug. 15	12 Week
			None	no	11 Week
			Aug. 6 —Sept. 10	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chattanooga White Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	White Taffeta Sculpture Highbrow Priscilla Paramount Belray Carrara	Whitetop Encore Illini Igloo Shasta Illini Snowdrift Little America
YELLOW	S	Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester Marie De Petris	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P	Goldsmith Highlander Sunnyside Illini Wampum Omega Yellow Galaxy Gold Medal	Yellow Sculpture Golden Chord Forty Niner Lollipop Pippin Klondike Sultan Yel. Paramount	Yel. Beauregard Brigadoon Yellow Shasta Yellow Igloo Jealousy
BRONZE & RED	S	Oak Leaf Gladys Pearson	Mrs. Eisenhower Bronze Frick Calvert's Gold	Ind. Bronze Br. Orchid Queen Anaconda
	P	Mahogany Viking Holiday Christmas Star Br. Minstrel Dk. Br. Minstrel Red Minstrel	Rusticon Thelma Rubaiyat Festival Olnura Dk. Br. Minuet	Beauregard Rubicon Br. Masterpiece
PINK	S	Pink Peter John	Thanks. Pink Ed. Seidewitz Calvert's Pink	Ind. Pink Orchid Queen Dk. Orchid Queen
	P	Valencia Heritage Illini Roseglow	Taffeta Delmar Almega Minuet	Portrait Criterion Rose Masterpiece

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM NOVEMBER 26, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 16	Aug. 6	None	Aug. 27	13 Week
			None	no	12 Week
			Aug. 13—Sept. 10	no	11 Week
			Aug. 6 —Sept. 19	no	10 Week
30-40°	July 23	Aug. 13	None	Aug. 27	13 Week
			None	no	12 Week
			Aug. 13—Sept. 10	no	11 Week
			Aug. 6 —Sept. 17	no	10 Week
25-30°	July 30	Aug. 20	None	Aug. 27	13 Week
			None	no	12 Week
			Aug. 13—Sept. 10	no	11 Week
			Aug. 6 —Sept. 17	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	13 Week	12 Week	11 Week	10 Week
WHITE	S	Chaffanooga White Peter John	Mefo Cream Mefo	Ind. White Crystal Queen
	P Acclaim Cotillion Wh. Snowdrop Yukon Satellite Dolomite	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	White Taffeta Sculpture Highbrow Priscilla Paramount Belray Carrara	Whitetop Encore Illini Igloo Shasta Illini Snowdrift Little America
YELLOW	S	Dk. Yel. Chaf'n'ga Yel. Chaffanooga Golden Pearson	Yellow Mefo Harvester Marie De Petris	Ind. Yellow Imp. Ind. Yellow Yellow Queen
	P Yellow Acclaim Golden Acclaim Cinderella Goldie Yellow Satellite Corsair	Goldsmith Highlander Sunnyside Illini Wampum Omega Yellow Galaxy Gold Medal	Yellow Sculpture Golden Chord Forty Niner Lollipop Pippin Klondike Sultan Yel. Paramount	Yel. Beauregard Brigadoon Yellow Shasta Yellow Igloo Jealousy
BRONZE & RED	S	Oak Leaf Gladys Pearson	Mrs. Eisenhower Bronze Frick Calvert's Gold	Ind. Bronze Br. Orchid Queen Anaconda
	P Mahogany Viking Holiday Christmas Star Br. Minstrel Dk. Br. Minstrel Red Minstrel	Illini Redwood Br. Goldsmith Apr. Valencia Red Heritage Galaxy Orange Galaxy	Rusticon Thelma Rubaiyat Festival Olnura Dk. Br. Minuet	Beauregard Rubicon Br. Masterpiece
PINK	S	Pink Peter John	Thanks. Pink Ed. Seidewitz Celvert's Pink	Ind. Pink Orchid Queen Dk. Orchid Queen
	P Debutante Minstrel Lt. Pk. Minstrel Imp. Pk. Minstrel	Valencia Heritage Illini Roseglow	Taffeta Delmar Almega Minuet	Portrait Criterion Rose Masterpiece

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM DECEMBER 3, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 23	Aug. 13	None	Aug. 27	14 Week
			None	no	13 Week
			Aug. 20—Sept. 10	no	12 Week
			Aug. 13—Sept. 17	no	11 Week
			Aug. 6—Sept. 24	no	10 Week
30-40°	July 30	Aug. 20	None	Aug. 27	14 Week
			None	no	13 Week
			Aug. 20—Sept. 10	no	12 Week
			Aug. 13—Sept. 17	no	11 Week
			Aug. 6—Sept. 24	no	10 Week
25-30°	Aug. 6	Aug. 27	None	no	13 Week
			Aug. 20—Sept. 10	no	12 Week
			Aug. 13—Sept. 17	no	11 Week
			Aug. 6—Sept. 24	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Dec. White Smith's White	Chattanooga Dec. Glory	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap White Riviera	Silvercrest Illini Peace Monarch Illini Glacier	Wh. Taffeta Highbrow Paramount Carrara	Whitetop Encore Illini Igloo Shasta Illini Snowdrift
YELLOW	S	Chalice Tobin's Yellow Mefeore	Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester Marie De Petris	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yellow Riviera Yel. Snowcrest Shamrock Vibrant	Illini Wampum Highlander Omega Gold Medal Yel. Galaxy	Golden Chord Forty Niner Lollipop Pippin Yel. Param'nt	Yel. Beauregard Yellow Shasta Yellow Igloo Brigadoon
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Br. Or. Queen
	P	Br. Riviera Topaz Christ. Greet'gs Merrymaker Poinsettia	Red Heritage Galaxy Orange Galaxy	Illini War Paint Rubaiyat	Beauregard Rubicon Br. Masterp'ce
PINK	S		Pk. Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Orchid Queen Dk. Or. Queen
	P	Riviera Rosalind Defiance Alvoda	Heritage Valencia	Taffeta Almega	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM DECEMBER 10, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 23	Aug. 13	None	Aug. 27	14 Week
			None	no	13 Week
			Aug. 20—Sept. 17	no	12 Week
			Aug. 13—Sept. 24	no	11 Week
			Aug. 8 —Oct. 1	no	10 Week
30-40°	July 30	Aug. 20	None	Aug. 27	14 Week
			None	no	13 Week
			Aug. 20—Sept. 17	no	12 Week
			Aug. 13—Sept. 24	no	11 Week
			Aug. 8 —Oct. 1	no	10 Week
25-30°	Aug. 6	Aug. 27	None	Aug. 27	14 Week
			None	no	13 Week
			Aug. 20—Sept. 17	no	12 Week
			Aug. 13—Sept. 24	no	11 Week
			Aug. 8 —Oct. 1	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Dec. White Smith's White	Chattanooga Dec. Glory	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap White Riviera	Silvercrest Illini Peace Monarch Illini Glacier	Wh. Taffeta Highbrow Paramount Carrara	Whitetop Encore Illini Igloo Shasta Illini Snowdrift
YELLOW	S	Chalice Tobin's Yellow Meteore	Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester Marie De Petris	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yellow Riviera Yel. Snowcrest Shamrock Vibrant	Illini Wampum Highlander Omega Gold Medal Yel. Galaxy	Golden Chord Forty Niner Lollipop Pippin Yel. Param'nt	Yel. Beauregard Yellow Shasta Yellow Igloo Brigadoon
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Br. Or. Queen
	P	Br. Riviera Topaz Christ. Greet'gs Merrymaker Poinsettia	Mahog. Viking Holiday Christ. Star Br. Minstrel Dk. Br. Minstrel	Red Heritage Galaxy Orange Galaxy	Illini War Paint Rubaiyat
PINK	S		Pk. Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Orchid Queen Dk. Or. Queen
	P	Riviera Rosalind Defiance Alvoda	Heritage Valencia	Taffeta Almega	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM DECEMBER 17, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 30	Aug. 20	None	no	14 Week
			Aug. 27—Sept. 17	no	13 Week
			Aug. 20—Sept. 24	no	12 Week
			Aug. 13—Oct. 1	no	11 Week
			Aug. 6—Oct. 8	no	10 Week
35-40°	Aug. 6	Aug. 27	None	no	14 Week
			Aug. 27—Sept. 17	no	13 Week
			Aug. 20—Sept. 24	no	12 Week
			Aug. 13—Oct. 1	no	11 Week
			Aug. 6—Oct. 8	no	10 Week
30-35°	Aug. 13	Sept. 3	None	no	14 Week
			Aug. 27—Sept. 17	no	13 Week
			Aug. 20—Sept. 24	no	12 Week
			Aug. 13—Oct. 1	no	11 Week
			Aug. 6—Oct. 8	no	10 Week
25-30°	Aug. 20	Sept. 10	Aug. 27—Sept. 17	no	13 Week
			Aug. 20—Sept. 24	no	12 Week
			Aug. 13—Oct. 1	no	11 Week
			Aug. 6—Oct. 8	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S	Dec. White Smith's White	Chattanooga Dec. Glory	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Snowcrest Cr. Snowcrest Silversmith Snowcap White Riviera	Silvercrest Illini Peace Monarch Illini Glacier	Wh. Taffeta Highbrow Paramount Carrara	Whitetop Encore Illini Igloo Shasta Illini Snowdrift
YELLOW	S	Chalice Tobin's Yellow Mefoore	Dk. Yel. Chat'n'ga Yel. Chattanooga Golden Pearson	Yellow Mefo Harvester Marie De Petris	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Yellow Riviera Yel. Snowcrest Shamrock Vibrant	Illini Wampum Highlander Omega Gold Medal Yel. Galaxy	Golden Chord Forty Niner Lollipop Pippin Yel. Param'nt	Yel. Beauregard Yellow Shasta Yellow Igloo Brigadoon
BRONZE & RED	S		Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Br. Or. Queen
	P	Br. Riviera Topaz Christ. Greef'gs Merrymaker Poinsettia	Red Heritage Galaxy Orange Galaxy	Illini War Paint Rubaiyat	Beauregard Rubicon Br. Masterp'ce
PINK	S		Pk. Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Orchid Queen Dk. Or. Queen
	P	Riviera Rosalind Defiance Alvoda	Heritage Valencia	Taffeta Almega	Portrait Criterion Rose Mast'p'ce

S—Standard

P—Pompon

Year-Around Chrysanthemum Flowering Schedule

BLOOM DECEMBER 24, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	July 30	Aug. 20	None	no	15 Week
			Sept. 3 —Sept. 17	no	14 Week
			Aug. 27—Sept. 24	no	13 Week
			Aug. 20—Oct. 1	no	12 Week
			Aug. 13—Oct. 8	no	11 Week
35-40°	Aug. 6	Aug. 27	Aug. 6 —Oct. 15	no	10 Week
			None	no	15 Week
			Sept. 3 —Sept. 17	no	14 Week
			Aug. 27—Sept. 24	no	13 Week
			Aug. 20—Oct. 1	no	12 Week
30-35°	Aug. 20	Sept. 10	Aug. 13—Oct. 8	no	11 Week
			Aug. 6 —Oct. 15	no	10 Week
			Aug. 27—Sept. 24	no	13 Week
			Aug. 20—Oct. 1	no	12 Week
			Aug. 20—Oct. 8	no	11 Week
25-30°	Aug. 27	Sept. 17	Aug. 20—Oct. 15	no	10 Week
			Aug. 27—Sept. 24	no	13 Week
			Aug. 27—Oct. 1	no	12 Week
			Aug. 27—Oct. 8	no	11 Week
			Aug. 27—Oct. 15	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	15 Week	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Dec. White Smith's White	Chattanooga Dec. Glory	Mefo Cream Mefo	Ind. White Crystal Queen
	P	Revelation Snow Talmeda Illini Cascade	Acclaim Cotillion Wh. Snowdrop Yukon Satellite	Silvercrest Illini Peace Monarch Illini Glacier	Wh. Taffeta Highbrow Paramount Carrara	Whitetop Encore Illini Igloo Shasta Ill. Snowdrift
YELLOW	S		Chalice Tobin's Yellow Meteore	Dk. Yel. Chat'n'go Yel. Chattan'ga Golden Pearson	Yellow Mefo Harvester Marie DePetri	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Siren Yuleflame Yellow Snow	Yel. Acclaim Gold. Acclaim Cinderella Yel. Satellite Corsair Goldie	Illini Wampum Highlander Omega Gold Medal Yel. Galaxy	Golden Chord Forty Niner Lollipop Pippin Yel. Param'nt	Yel. Beaur'g'd Yellow Shasta Yellow Igloo Brigadoon
BRONZE & RED	S			Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bronze Br. Or. Queen
	P	Br. Riviera Topaz Christ Greet'gs Merrymaker Poinsettia	Mahog. Viking Holiday Christ. Star Br. Minstrel Dk. Br. Minstrel	Red Heritage Galaxy Or. Galaxy	Ill. War Paint Rubaiyat	Beauregard Rubicon Br. Mast'p'ce
PINK	S			Pink Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Orchid Queen Dk. Or. Queen
	P	Riviera Rosalind Defiance Alvoda	Debutante Minstrel Lt. Pk. Minstrel Imp. Minstrel	Heritage Valencia	Taffeta Almega	Portrait Criterion Rose Mast'p'ce

Year-Around Chrysanthemum Flowering Schedule

BLOOM DECEMBER 31, 1956

Latitude	Plant	Pinch*	Lighting Period	Start Shade	Response Group
40-45°	Aug. 6	Aug. 27	None	no	15 Week
			Sept. 3 —Sept. 24	no	14 Week
			Aug. 27—Oct. 1	no	13 Week
			Aug. 20—Oct. 8	no	12 Week
			Aug. 13—Oct. 15	no	11 Week
			Aug. 6 —Oct. 22	no	10 Week
35-40°	Aug. 13	Sept. 3	None	no	15 Week
			Sept. 3 —Sept. 24	no	14 Week
			Aug. 27—Oct. 1	no	13 Week
			Aug. 20—Oct. 8	no	12 Week
			Aug. 13—Oct. 15	no	11 Week
			Aug. 6 —Oct. 22	no	10 Week
30-35°	Aug. 20	Sept. 10	Aug. 27—Oct. 1	no	13 Week
			Aug. 20—Oct. 8	no	12 Week
			Aug. 20—Oct. 15	no	11 Week
			Aug. 20—Oct. 22	no	10 Week
25-30°	Aug. 27	Sept. 17	Aug. 27—Oct. 8	no	12 Week
			Aug. 27—Oct. 15	no	11 Week
			Aug. 27—Oct. 22	no	10 Week

*For No Pinch Method: Plant and Light on Pinch Date

VARIETIES IN RESPONSE GROUPS

	15 Week	14 Week	13 Week	12 Week	11 Week	10 Week
WHITE	S		Dec. White Smith's White	Chattanooga Dec. Glory	Melo Cream Melo	Ind. White Crystal Queen
	P	Revelation Snow Talmeda Ill. Cascade	Snowcrest Cr. Snowcrest Silversmith Snowcap White Riviera	Acclaim Cotillion Wh. Snowdrop Yukon Satellite	Silvercrest Illini Peace Monarch Illini Glacier	Wh. Taffeta Highbrow Paramount Carrara
YELLOW	S		Chalice Tobin's Yellow Meteore	D. Y. Chat'n'ga Yel. Chattan'ga Golden Pearson	Yel. Melo Harvester Marie DePetris	Ind. Yellow Imp. Ind. Yel. Yellow Queen
	P	Siren Yuleflame Yellow Snow	Yel. Riviera Yel. Snowcrest Shamrock Vibrant	Yel. Acclaim Gold. Acclaim Cinderella Yel. Satellite Corsair Goldie	Illini Wampum Highlander Omega Gold Medal Yellow Galaxy	Golden Chord Forty Niner Lollipop Pippin Yel. Param'nt
BRONZE & RED	S			Oak Leaf Br. Peter John	Calvert's Gold	Ind. Bonze Br. Or. Queen
	P		Br. Riviera Topaz Christ. Greef'gs Merrymaker Poinsettia	Red Heritage Galaxy Orange Galaxy	Ill. War Paint Rubaiyat	Beauregard Rubicon Br. Mastep'ce
PINK	S			Pk. Peter John	Thanks. Pink Calvert's Pink	Ind. Pink Orchid Queen Dk. Or. Queen
	P		Riviera Rosalind Defiance Alvoda	Debutante Minstrel Lt. Pk. Minstrel Imp. Minstrel	Heritage Valencia	Taffeta Almega

S—Standard

P—Pompon

Chrysanthemum Pot Plant Culture

High quality pot plants can only be grown when all cultural conditions are optimum. By optimum conditions we refer particularly to the basic conditions of a good soil, disease-free cuttings, the absence of any checks in growth from cutting to the mature flowering plant, adequate means of temperature control and the selection of the right varieties.

Soil

A good, fibrous silt loam directly from the field, to which one-third of well-rotted manure or German peat has been added, plus an application of super-phosphate will give excellent results. Steam sterilization of the soil is advisable. You can plant immediately after steaming, provided you water heavily after planting the cuttings. Some growers are getting extra quick root action by using a top dressing of one-half inch of German peat over their regular soil mixture in each pot and planting through this mulch of peat. It saves on watering and produces more breaks after pinching.

Watering and Humidity

After planting, water thoroughly to set the soil around the roots. Repeat this type of watering when the soil gets dry. Organic matter in the soil will facilitate watering and will tend to avoid extreme fluctuations in moisture supply. You can overwater a chrysanthemum as easily as a poinsettia plant. Overwatering will rot the roots, and the tops will take on a very yellow color.

For best results grow all potted chrysanthemums under glass. Do not shade the glass any more than necessary. Usually a light shade is necessary in mid summer. Shade on the glass is only there for the convenience of the grower and not for the requirements of the plant. Keep humidity in the house by wetting down benches and walks, and by an occasional syring over the plants.

Fertilizing

The foliage should retain a bright green luster throughout the life of the plant. The lower leaves should never be allowed to turn a light green due to low fertility. A strong well-grown pot plant is a well-fed plant. Pot plants should be fed more frequently than those grown in a bench, as constant leaching lowers the nutrient level in pots faster than in bench culture.

Liquid fertilizers are very effective. Weekly feedings have produced excellent results. After the cuttings are planted, water the plants in with a weak solution (starter solution) of ammonium sulfate. Feed every week with a half strength ammonium sulfate, 1 ounce to 4 gallons of water. When buds are visible, feed with 15-30-15, 15-15-15, or 20-20-20 at the rate of 1 ounce to 4 gallons of water. Last feeding should be made when the plants are ready to sell. Maintain continuous and accu-

rate feedings during the winter as well as during the remainder of the year. During the winter months cut the fertilizer concentration to 1 ounce to 8 gallons of water.

Brown edges on the margins of the leaves during the summer have been attributed to too much phosphate and potassium in the soil or in the fertilizer. Some growers have preferred to go easy on these elements, and their plants showed very little of the marginal burning during the hot summer days.

Temperature

The optimum night temperature is 65 degrees. Day temperatures should be 75 to 85 degrees when the light intensity is high and 70 degrees during cloudy days. Heat checks develop when the night temperatures reach 90 degrees or higher. This check is very similar to the check that develops when plants are taken out of short-day treatment too early or when the black cloth treatment is missed too often. The only practical way to overcome this heat check is to install air conditioning to lower the temperatures. Growing the crop at less than a 65 degree night temperature results in uneven and delayed flowering. A gradual temperature drop to 55 degrees after buds show color is advisable for some pink and bronze varieties.

Shading and Disbudding

Use same procedure as for cut flower crop. Black cloth treatment should continue until the buds are taken. The last pinch is usually made the same day short-day treatment is started. However, if you are troubled with tall potted plants, delay the last pinch 10 to 14 days after starting the shading program. Disbud each shoot to one bud when buds are large enough to handle.



Bonnaffon Delux

Chrysanthemum Pot Plant Culture

Planting and Pinching

Plant the rooted cuttings which have been graded for height and stem diameter directly into the finishing pot. Rhizoctonia will develop in the stem when the cuttings are planted too deeply. It is better to plant the cuttings around the pot rather than the four with one in the center practice. Planting the cutting on an angle will increase the number of breaks that develop after the pinch.

No-Pinch Method. Plant 7 to 9 cuttings in a 6-inch pot and give short day treatment immediately. The blooms will be very large and the stems will be much stronger than when growing pinched plants. The Indianapolis varieties are often grown this no-pinch method.

Single-Pinch Method. The most practical method of growing potted plants today. It is much faster and produces a very uniform plant with strong stems. Plant 5 cuttings of Bonnaffon Deluxe or 6 cuttings of the other varieties in a 6-inch pot. Pinch the plants high in the soft growth according to the schedule found in the year-around program.

Two-Pinch Method. Probably the most common several years ago, but still very good results can be obtained from this method. Plant 3 or 4 cuttings in a 6-inch pot. Pinch the plants the first time 14 days after planting and wait 21 days and pinch the second time. Long-day treatment should be maintained either naturally or through the use of additional light during this period. Short-day treatment should start at the time of the second pinch.

Modified Two-Pinch Method. We recommend this cultural method for those varieties that normally grow too tall, such as Queen's Lace, Indianapolis varieties, Copperhead, etc. Grow the plants similar to the "Single-Pinch Method" and start the short-day treatment. After the plant has been given the short-day treatment — 21 or 28 days depending on the time of year, pinch the second time. This second pinching will not delay the flowering very much more than one week but will keep the plant much shorter than if not given this second pinch.

If plants flower too tall, you had better delay your last pinch by 10 to 14 days. In some localities pot plants will grow taller than in others. Sometimes too much shade on the glass will cause the plants to stretch. Yet there are many varieties that grow too tall when given the short-day treatment the day of the last pinch. If this is true, start short-day treatment and give the final pinch 10 to 14 days after short-day treatment was started. Royal Bronze, Indianapolis varieties, Queen's Lace, Yellow Lace and Little America are often grown too tall, so delay pinching.

Garden Mum Pot Plants for Mother's Day

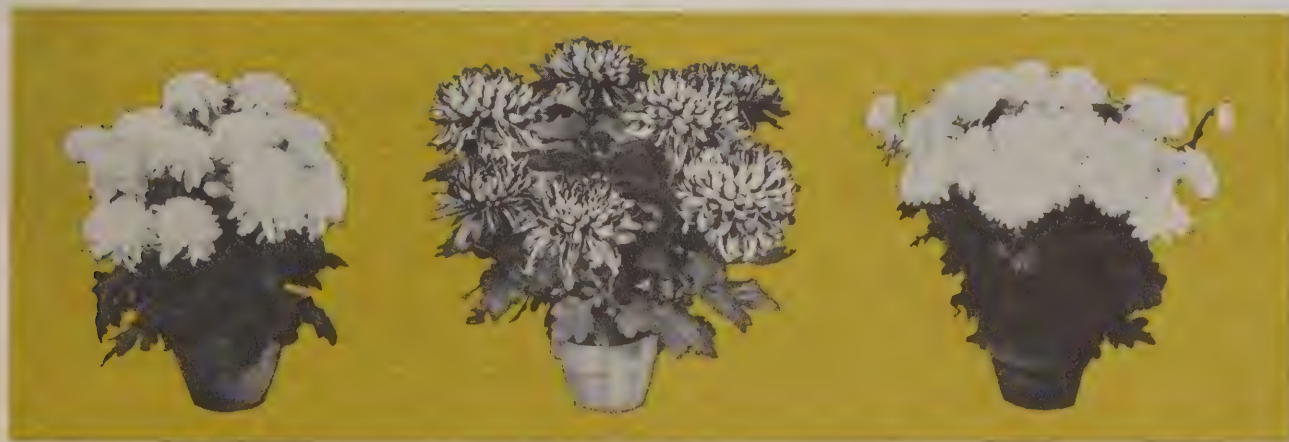
Garden mum plants in full bloom make ideal potted plants for Mother's Day. This should be a valuable addition to the list of spring pot plants. For best results, 5 cuttings should be planted in a 6-inch pot or 2 cuttings in a 4-inch pot. After these pot plants are through flowering, they should be cut back to within 3 inches of the soil level and planted into the garden. These same plants will bloom again in the fall. We recommend the following varieties: Christopher Columbus, Ostosa, Yellow Christopher Columbus, W. P. Snyder, Remembrance, Spellbound and Joybringer. To facilitate selection, we are offering a collection suitable for this culture. This collection contains the better varieties which have been tried and proven.

SINGLE-PINCH METHOD

1. Plant 5 rooted cuttings from lighted stock, March 5 in a 6-inch pot, or 2 cuttings in 4-inch pot.
2. Pinch plants March 12.
3. Grow in 65-degree house.
4. Apply black cloth April 9, if necessary.

TWO-PINCH METHOD

1. Plant rooted cuttings from lighted stock, February 6, and pinch same day.
2. Apply 4 hours of additional light each night from February 6 to March 12.
3. Pinch second time March 12, give short-day treatment April 9, if necessary.
4. Grow in 65-degree house.



Georgia

Delaware

Alaska

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
JANUARY 7, 1957	Bonnaffon Deluxe	Oct. 8	Oct. 8 - Oct. 22	Oct. 22	no
	Calvert's Gold				
	Calvert's Pink				
	Wilson's White	Oct. 8	Oct. 8 - Oct. 29	Oct. 22	no
	Delaware				
	Portrait	Oct. 15	Oct. 15 - Oct. 29	Oct. 29	no
	Criterion				
	Humdinger				
	Queen of Pinks				
JANUARY 14, 1957	Queen's Lace	Oct. 15	Oct. 15 - Oct. 29	1st Nov. 5	no
	Gold Lace			2nd Dec. 3	
	Granite State	Oct. 15	Oct. 15 - Nov. 5	Oct. 29	no
	Luna				
	Pacesetter	Oct. 22	Oct. 22 - Oct. 29	Nov. 5	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
JANUARY 14, 1957	Indianapolis Pink	Oct. 22	Oct. 22 - Nov. 12	Nov. 5	no
	Ethrelda				
	Red Ethrelda	Oct. 22	Oct. 22 - Nov. 12	Nov. 5	no
	Blazing Gold				
	Bonnaffon Deluxe	Oct. 15	Oct. 15 - Oct. 29	Oct. 29	no
	Calvert's Gold				
	Calvert's Pink				
	Wilson's White	Oct. 15	Oct. 15 - Nov. 5	Oct. 29	no
	Delaware				
JANUARY 14, 1957	Portrait	Oct. 22	Oct. 22 - Nov. 5	Nov. 5	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Oct. 22	Oct. 22 - Nov. 5	1st Nov. 12	no
	Gold Lace			2nd Dec. 10	
	Granite State	Oct. 22	Oct. 22 - Nov. 12	Nov. 5	no
	Luna				
JANUARY 14, 1957	Pacesetter	Oct. 29	Oct. 29 - Nov. 5	Nov. 12	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink	Oct. 29	Oct. 29 - Nov. 19	Nov. 12	no
	Ethrelda				
	Red Ethrelda	Oct. 29	Oct. 29 - Nov. 19	Nov. 12	no
	Blazing Gold				
JANUARY 14, 1957	Bonnaffon Deluxe	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Calvert's Gold				
JANUARY 14, 1957	Calvert's Pink	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Wilson's White				
JANUARY 14, 1957	Delaware	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Portrait				
JANUARY 14, 1957	Criterion	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Humdinger				
JANUARY 14, 1957	Queen of Pinks	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Queen's Lace				
JANUARY 14, 1957	Gold Lace	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Granite State				
JANUARY 14, 1957	Luna	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Pacesetter				
JANUARY 14, 1957	Little America	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Indianapolis White				
JANUARY 14, 1957	Dark Ind. Yellow	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Indianapolis Pink				
JANUARY 14, 1957	Ethrelda	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Red Ethrelda				
JANUARY 14, 1957	Blazing Gold	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Bonnaffon Deluxe				
JANUARY 14, 1957	Calvert's Gold	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Calvert's Pink				
JANUARY 14, 1957	Wilson's White	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Delaware				
JANUARY 14, 1957	Portrait	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Criterion				
JANUARY 14, 1957	Humdinger	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Queen of Pinks				
JANUARY 14, 1957	Queen's Lace	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Gold Lace				
JANUARY 14, 1957	Granite State	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Luna				
JANUARY 14, 1957	Pacesetter	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Little America				
JANUARY 14, 1957	Indianapolis White	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Dark Ind. Yellow				
JANUARY 14, 1957	Indianapolis Pink	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Ethrelda				
JANUARY 14, 1957	Red Ethrelda	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Blazing Gold				

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
JANUARY 21, 1957	Bonnaffon Deluxe	Oct. 22	Oct. 22 - Nov. 5	Nov. 5	no
	Calvert's Gold				
	Calvert's Pink				
	Wilson's White	Oct. 22	Oct. 22 - Nov. 12	Nov. 5	no
	Delaware				
	Portrait	Oct. 29	Oct. 29 - Nov. 12	Nov. 12	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Oct. 29	Oct. 29 - Nov. 12	1st Nov. 19 2nd Dec. 17	no no
	Gold Lace				
JANUARY 28, 1957	Granite State	Oct. 29	Oct. 29 - Nov. 19	Nov. 12	no
	Luna				
	Pacesetter	Nov. 5	Nov. 5 - Nov. 12	Nov. 19	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Ethrelda	Nov. 5	Nov. 5 - Nov. 26	Nov. 19	no
	Red Ethrelda				
	Blazing Gold	Nov. 12	Nov. 12 - Nov. 26	Nov. 26	no
	Bonnaffon Deluxe	Oct. 29	Oct. 29 - Nov. 12	Nov. 12	no
	Calvert's Gold				
	Calvert's Pink				
JANUARY 28, 1957	Wilson's White	Oct. 29	Oct. 29 - Nov. 19	Nov. 12	no
	Delaware				
	Portrait	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Nov. 5	Nov. 5 - Nov. 19	1st Nov. 26 2nd Dec. 24	no
	Gold Lace				
	Granite State	Nov. 5	Nov. 5 - Nov. 26	Nov. 19	no
	Luna				
JANUARY 28, 1957	Pacesetter	Nov. 12	Nov. 12 - Nov. 19	Nov. 26	no
	Little America				
	Indianapolis White				
	Dark Ind. White				
	Indianapolis Pink				
	Ethrelda	Nov. 12	Nov. 12 - Dec. 3	Nov. 26	no
	Red Ethrelda				
	Blazing Gold	Nov. 19	Nov. 19 - Dec. 3	Dec. 3	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
FEBRUARY 4, 1957	Bonnaffon Deluxe	Nov. 5	Nov. 5 - Nov. 19	Nov. 19	no
	Calvert's Gold				
	Wilson's White	Nov. 5	Nov. 5 - Nov. 26	Nov. 19	no
	Delaware				
	Portrait	Nov. 12	Nov. 12 - Nov. 26	Nov. 26	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Nov. 12	Nov. 12 - Nov. 26	1st Dec. 3	no
	Gold Lace			2nd Dec. 31	
FEBRUARY 11, 1957	Granite State	Nov. 12	Nov. 12 - Dec. 3	Nov. 26	no
	Luna				
	Pacesetter	Nov. 19	Nov. 19 - Nov. 26	Dec. 3	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Ethrelda	Nov. 19	Nov. 19 - Dec. 10	Dec. 3	no
	Red Ethrelda				
	Blazing Gold	Nov. 26	Nov. 26 - Dec. 10	Dec. 10	no
FEBRUARY 11, 1957	Bonnaffon Deluxe	Nov. 12	Nov. 12 - Nov. 26	Nov. 26	no
	Calvert's Gold				
	Wilson's White	Nov. 12	Nov. 12 - Dec. 3	Nov. 26	no
	Delaware				
	Portrait	Nov. 19	Nov. 19 - Dec. 3	Dec. 3	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Nov. 19	Nov. 19 - Dec. 3	1st Dec. 10	no
	Gold Lace			2nd Jan. 7	
FEBRUARY 11, 1957	Granite State	Nov. 19	Nov. 19 - Dec. 10	Dec. 3	no
	Luna				
	Pacesetter	Nov. 26	Nov. 26 - Dec. 3	Dec. 10	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Ethrelda	Nov. 26	Nov. 26 - Dec. 17	Dec. 10	no
	Red Ethrelda				
	Blazing Gold	Dec. 3	Dec. 3 - Dec. 17	Dec. 17	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
FEBRUARY 18, 1957	Bonnaffon Deluxe	Nov. 19	Nov. 19 - Dec. 3	Dec. 3	no
	Calvert's Gold				
	Wilson's White	Nov. 19	Nov. 19 - Dec. 10	Dec. 3	no
	Delaware				
	Portrait	Nov. 26	Nov. 26 - Dec. 10	Dec. 10	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Nov. 26	Nov. 26 - Dec. 10	1st Dec. 17	no
	Gold Lace			2nd Jan. 14	
FEBRUARY 25, 1957	Granite State	Nov. 26	Nov. 26 - Dec. 17	Dec. 10	no
	Luna				
	Pacesetter	Dec. 3	Dec. 3 - Dec. 10	Dec. 17	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Ethrelda	Dec. 3	Dec. 3 - Dec. 24	Dec. 17	no
	Red Ethrelda				
	Blazing Gold	Dec. 10	Dec. 10 - Dec. 24	Dec. 24	no
	Bonnaffon Deluxe	Nov. 26	Nov. 26 - Dec. 10	Dec. 10	no
	Calvert's Gold				
FEBRUARY 25, 1957	Wilson's White	Nov. 26	Nov. 26 - Dec. 17	Dec. 10	no
	Delaware				
	Portrait	Dec. 3	Dec. 3 - Dec. 17	Dec. 17	no
	Criterion				
	Humdinger				
	Queen of Pinks				
	Queen's Lace	Dec. 3	Dec. 3 - Dec. 17	1st Dec. 24	no
	Gold Lace			2nd Jan. 21	
	Granite State	Dec. 3	Dec. 3 - Dec. 24	Dec. 17	no
	Luna				
FEBRUARY 25, 1957	Pacesetter	Dec. 10	Dec. 10 - Dec. 17	Dec. 24	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Ethrelda	Dec. 10	Dec. 10 - Dec. 31	Dec. 24	no
	Red Ethrelda				
	Blazing Gold	Dec. 17	Dec. 17 - Dec. 31	Dec. 31	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
MARCH 4, 1957	Bonnaffon Deluxe	Dec. 3	Dec. 3 - Dec. 17	Dec. 17	no
	Calvert's Gold				
	Wilson's White	Dec. 3	Dec. 3 - Dec. 24	Dec. 17	no
	Delaware				
	Criterion				
	Humdinger	Dec. 10	Dec. 10 - Dec. 24	Dec. 24	no
	Queen of Pinks				
	Queen's Lace	Dec. 10	Dec. 10 - Dec. 24	1st Dec. 31	
	Gold Lace			2nd Jan. 28	no
	Granite State	Dec. 10	Dec. 10 - Dec. 31	Dec. 24	no
	Luna				
	Pacesetter				
	Little America				
	Indianapolis White	Dec. 17	Dec. 17 - Dec. 24	Dec. 31	no
	Dark Ind. Yellow				
MARCH 11, 1957	Indianapolis Pink				
	Portrait				
	Ethrelda	Dec. 17	Dec. 17 - Jan. 7	Dec. 31	no
	Red Ethrelda				
	Monty	Dec. 17	Dec. 17 - Dec. 31	Dec. 31	no
	Blazing Gold	Dec. 24	Dec. 24 - Jan. 7	Jan. 7	no
	Gardenia				
	Sunburst	Dec. 24	Dec. 24 - Jan. 7	Jan. 14	no
	Bonnaffon Deluxe	Dec. 10	Dec. 10 - Dec. 24	Dec. 24	no
	Calvert's Gold				
	Wilson's White	Dec. 10	Dec. 10 - Dec. 31	Dec. 24	no
	Delaware				
	Criterion				
	Humdinger	Dec. 17	Dec. 17 - Dec. 31	Dec. 31	no
	Queen of Pinks				
	Queen's Lace	Dec. 17	Dec. 17 - Dec. 31	1st Jan. 7	
	Gold Lace			2nd Feb. 4	no
	Granite State	Dec. 17	Dec. 17 - Jan. 7	Dec. 31	no
	Luna				
	Pacesetter				
	Little America				
	Indianapolis White	Dec. 24	Dec. 24 - Dec. 31	Jan. 7	no
	Dark Ind. Yellow				
	Indianapolis Pink				
	Portrait				
	Ethrelda	Dec. 24	Dec. 24 - Jan. 14	Jan. 7	no
	Red Ethrelda				
	Monty	Dec. 24	Dec. 24 - Jan. 7	Jan. 7	no
	Blazing Gold	Dec. 31	Dec. 31 - Jan. 14	Jan. 14	no
	Gardenia				
	Sunburst	Dec. 31	Dec. 31 - Jan. 14	Jan. 21	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
MARCH 18, 1957	Bonnaffon Deluxe	Dec. 17	Dec. 17 - Dec. 31	Dec. 31	no
	Wilson's White Delaware	Dec. 17	Dec. 17 - Jan. 7	Dec. 31	no
	Criterion	Dec. 24	Dec. 24 - Jan. 7	Jan. 7	no
	Humdinger				
	Queen of Pinks	Dec. 24	Dec. 24 - Jan. 7	1st Jan. 14 2nd Feb. 11	no
	Queen's Lace				
	Gold Lace				
	Illini Snowdrift	Dec. 24	Dec. 24 - Jan. 14	Jan. 7	no
	Granite State				
	Luna	Dec. 31	Dec. 31 - Jan. 7	Jan. 14	no
	Pacesetter				
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Portrait				
	Ethrelda	Dec. 31	Dec. 31 - Jan. 21	Jan. 14	no
	Red Ethrelda				
	Monty	Dec. 31	Dec. 31 - Jan. 14	Jan. 14	no
	Blazing Gold	Jan. 7	Jan. 7 - Jan. 17	Jan. 17	no
	Gardenia				
	Georgia	Jan. 7	Jan. 7 - Jan. 17	Jan. 24	no
	Sunburst				
MARCH 25, 1957	Bonnaffon Deluxe	Dec. 24	Dec. 24 - Jan. 7	Jan. 7	no
	Wilson's White Delaware	Dec. 24	Dec. 24 - Jan. 14	Jan. 7	no
	Criterion	Dec. 31	Dec. 31 - Jan. 14	Jan. 14	no
	Humdinger				
	Queen of Pinks	Dec. 31	Dec. 31 - Jan. 14	1st Jan. 21 2nd Feb. 18	no
	Queen's Lace				
	Gold Lace				
	Illini Snowdrift	Dec. 31	Dec. 31 - Jan. 21	Jan. 14	no
	Granite State				
	Luna	Jan. 7	Jan. 7 - Jan. 14	Jan. 21	no
	Pacesetter				
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Portrait				
	Ethrelda	Jan. 7	Jan. 7 - Jan. 24	Jan. 17	no
	Red Ethrelda				
	Monty	Jan. 7	Jan. 7 - Jan. 17	Jan. 17	no
	Blazing Gold	Jan. 14	Jan. 14 - Jan. 24	Jan. 24	no
	Gardenia				
	Georgia	Jan. 14	Jan. 14 - Jan. 24	Jan. 31	no
	Sunburst				

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
APRIL 2, 1956	Bonnaffon Deluxe	Jan. 2	Jan. 2 - Jan. 12	Jan. 12	no
	Wilson's White Delaware	Jan. 2	Jan. 2 - Jan. 19	Jan. 12	no
	Criterion Queen of Pinks	Jan. 9	Jan. 9 - Jan. 19	Jan. 19	no
	Queen's Lace Gold Lace Illini Snowdrift Alaska	Jan. 9	Jan. 9 - Jan. 19	1st Jan. 26 2nd Feb. 23	no
	Granite State Luna	Jan. 9	Jan. 9 - Jan. 26	Jan. 19	no
	Pacesetter Little America Indianapolis White Dark Ind. Yellow Indianapolis Pink Portrait Humdinger	Jan. 16	Jan. 16 - Jan. 19	Jan. 26	no
	Ethrelda Red Ethrelda	Jan. 16	Jan. 16 - Feb. 2	Jan. 26	no
	Monty	Jan. 16	Jan. 16 - Jan. 26	Jan. 26	no
	Blazing Gold Gardenia Georgia	Jan. 23	Jan. 23 - Feb. 2	Feb. 2	no
	Sunburst	Jan. 23	Jan. 23 - Feb. 2	Feb. 9	no
	Bonnaffon Deluxe	Jan. 9	Jan. 9 - Jan. 19	Jan. 19	no
	Wilson's White Delaware	Jan. 9	Jan. 9 - Jan. 26	Jan. 19	no
	Criterion Queen of Pinks	Jan. 16	Jan. 16 - Jan. 26	Jan. 26	no
	Queen's Lace Gold Lace Illini Snowdrift Alaska	Jan. 16	Jan. 16 - Jan. 26	1st Feb. 2 2nd Mar. 1	no
	Granite State Luna	Jan. 16	Jan. 16 - Feb. 2	Jan. 26	no
APRIL 9, 1956	Pacesetter Little America Indianapolis White Dark Ind. Yellow Indianapolis Pink Portrait Humdinger	Jan. 23	Jan. 23 - Jan. 26	Feb. 2	no
	Ethrelda Red Ethrelda	Jan. 23	Jan. 23 - Feb. 9	Feb. 2	no
	Monty	Jan. 23	Jan. 23 - Feb. 2	Feb. 2	no
	Blazing Gold Gardenia Georgia	Jan. 30	Jan. 30 - Feb. 9	Feb. 9	no
	Sunburst	Jan. 30	Jan. 30 - Feb. 9	Feb. 16	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
APRIL 16, 1956	Bonnafton Deluxe	Jan. 16	Jan. 16 - Jan. 26	Jan. 26	Mar. 12
	Wilson's White Delaware	Jan. 16	Jan. 16 - Feb. 2	Jan. 26	Mar. 19
	Criterion	Jan. 23	Jan. 23 - Feb. 2	Feb. 2	Mar. 19
	Queen of Pinks				
	Queen's Lace	Jan. 23	Jan. 23 - Feb. 2	1st Feb. 9	Mar. 19
	Gold Lace			2nd Mar. 8	
	Illini Snowdrift				
	Alaska				
	Granite State	Jan. 23	Jan. 23 - Feb. 9	Feb. 2	no
	Luna				
	Pacesetter				
	Little America				
	Indianapolis White	Jan. 30	Jan. 30 - Feb. 2	Feb. 9	Mar. 19
	Dark Ind. Yellow				
	Indianapolis Pink				
	Portrait				
	Humdinger				
	Ethrelda	Feb. 6	Feb. 6 - Feb. 20	Feb. 13	no
	Red Ethrelda				
APRIL 23, 1956	Monty	Feb. 6	Feb. 6 - Feb. 13	Feb. 13	no
	Blazing Gold				
	Georgia	Feb. 13	Feb. 13 - Feb. 20	Feb. 20	no
	Gardenia				
	Sunburst	Feb. 13	Feb. 13 - Feb. 20	Feb. 27	no
	Bonnafton Deluxe	Jan. 23	Jan. 23 - Feb. 2	Feb. 2	Mar. 12
	Wilson's White Delaware	Jan. 23	Jan. 23 - Feb. 9	Feb. 2	Mar. 19
	Pacesetter				
	Little America				
	Indianapolis White	Feb. 6	None	Feb. 13	Mar. 19
	Dark Ind. Yellow				
	Indianapolis Pink				
	Portrait				
	Humdinger				
	Criterion	Feb. 6	Feb. 6 - Feb. 13	Feb. 13	Mar. 19
	Queen of Pinks				
	Queen's Lace	Feb. 6	None	1st Feb. 13	Mar. 19
	Gold Lace			2nd Mar. 12	
	Illini Snowdrift				
	Alaska				
	Granite State	Feb. 6	Feb. 6 - Feb. 20	Feb. 13	Mar. 26
	Luna				
	Ethrelda	Feb. 13	Feb. 13 - Feb. 27	Feb. 20	no
	Red Ethrelda				
	Monty	Feb. 13	Feb. 13 - Feb. 20	Feb. 20	Mar. 26
	Blazing Gold				
	Georgia	Feb. 20	Feb. 20 - Feb. 27	Feb. 27	no
	Gardenia				
	Sunburst	Feb. 27	None	Mar. 5	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
APRIL 30, 1956	Bonnaffon Deluxe.....	Feb. 6	Feb. 6 - Feb. 13	Feb. 13	Mar. 12
	Wilson's White.....	Feb. 6	Feb. 6 - Feb. 20	Feb. 13	Mar. 19
	Delaware.....				
	Pacesetter.....				
	Little America.....				
	Indianapolis White...				
	Dark Ind. Yellow.....	Feb. 13	None	Feb. 20	Mar. 19
	Indianapolis Pink.....				
	Portrait.....				
	Humdinger.....				
	Criterion.....	Feb. 13	Feb. 13 - Feb. 20	Feb. 20	Mar. 19
	Queen of Pinks.....				
	Queen's Lace.....				
	Gold Lace.....	Feb. 13	None	1st Feb. 20	
	Illini Snowdrift.....			2nd Mar. 19	Mar. 19
	Alaska.....				
	Granite State.....	Feb. 13	Feb. 13 - Feb. 27	Feb. 20	Mar. 26
	Luna.....				
MAY 7, 1956	Ethrelda.....	Feb. 20	Feb. 20 - Mar. 5	Feb. 27	Apr. 2
	Red Ethrelda.....				
	Monty.....	Feb. 20	Feb. 20 - Feb. 27	Feb. 27	Mar. 26
	Gardenia.....				
	Blazing Gold.....	Feb. 27	Feb. 27 - Mar. 5	Mar. 5	Apr. 2
	Georgia.....				
	Sunburst.....	Mar. 5	None	Mar. 12	Apr. 2
	Bonnaffon Deluxe.....	Feb. 13	Feb. 13 - Feb. 20	Feb. 20	Mar. 12
	Wilson's White.....	Feb. 13	Feb. 13 - Feb. 27	Feb. 20	Mar. 19
	Delaware.....				
	Pacesetter.....				
	Little America.....				
	Indianapolis White...				
	Dark Ind. Yellow.....	Feb. 20	None	Feb. 27	Mar. 19
	Indianapolis Pink.....				
	Portrait.....				
	Humdinger.....				
	Criterion.....	Feb. 20	Feb. 20 - Feb. 27	Feb. 27	Mar. 19
	Queen of Pinks.....				
MAY 7, 1956	Queen's Lace.....				
	Gold Lace.....	Feb. 20	None	1st Feb. 27	
	Illini Snowdrift.....			2nd Mar. 26	Mar. 19
	Alaska.....				
	Granite State.....	Feb. 20	Feb. 20 - Mar. 5	Feb. 27	Mar. 26
	Luna.....				
	Monty.....	Feb. 27	Feb. 27 - Mar. 5	Mar. 5	Mar. 26
	*Reveille.....				
	*Ostosa.....				
	*Chris Columbus.....				
	*Gardenia.....				
	*Moonlight.....				
	*Yel. Chris Columbus..				
	Blazing Gold.....				
	Georgia.....				
	Red Ethrelda.....	Mar. 5	Mar. 5 - Mar. 12	Mar. 12	Apr. 2
	*Radiance.....				
	*W. P. Snyder.....				
	Ethrelda.....				
	*Cupid.....				
	*Joybringer.....				
	*Spellbound.....				
	Sunburst.....	Mar. 12	None	Mar. 19	Apr. 2

*Recommended to follow with second tip pinch within three weeks.

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
MAY 14, 1956	Bonnafton Deluxe.....	Feb. 20	Feb. 20 - Feb. 27	Feb. 27	Mar. 12
	Wilson's White.....	Feb. 20	Feb. 20 - Mar. 5	Feb. 27	Mar. 19
	Delaware.....				
	Pacesetter.....				
	Little America.....				
	Indianapolis White.....				
	Dark Ind. Yellow.....	Feb. 27	None	Mar. 5	Mar. 19
	Indianapolis Pink.....				
	Portrait.....				
	Humdinger.....				
	Criterion.....	Feb. 27	Feb. 27 - Mar. 5	Mar. 5	Mar. 19
	Queen of Pinks.....				
	Queen's Lace.....				
	Gold Lace.....	Feb. 27	None	1st Mar. 5	
	Illini Snowdrift.....			2nd Apr. 2	Mar. 19
	Alaska.....				
	Granite State.....	Feb. 27	Feb. 27 - Mar. 12	Mar. 5	Mar. 26
	Luna.....				
	Monty.....	Mar. 5	Mar. 5 - Mar. 12	Mar. 12	Mar. 26
	*Reveille.....				
MAY 21, 1957	*Ostosa.....				
	*Chris Columbus.....				
	*Gardenia.....				
	*Moonlight.....				
	*Yel. Chris Columbus..				
	Blazing Gold.....				
	Georgia.....	Mar. 12	Mar. 12 - Mar. 19	Mar. 19	Apr. 2
	Red Ethrelda.....				
	*Radiance.....				
	*W. P. Snyder.....				
	Ethrelda.....				
	*Cupid.....				
	*Joybringer.....				
	*Spellbound.....				
	Sunburst.....	Mar. 19	None	Mar. 26	Apr. 2
	Bonnafton Deluxe.....	Feb. 27	Feb. 27 - Mar. 5	Mar. 5	Mar. 12
	Wilson's White.....	Feb. 27	Feb. 27 - Mar. 12	Mar. 5	Mar. 19
	Delaware.....				
	Pacesetter.....				
	Portrait.....	Mar. 5	None	Mar. 12	Mar. 19
	Humdinger.....				
	Criterion.....				
	Queen's Lace.....				
	Gold Lace.....	Mar. 5	None	1st Mar. 12	Mar. 19
	Illini Snowdrift.....			2nd Apr. 9	
	Alaska.....				
	Granite State.....	Mar. 5	Mar. 5 - Mar. 19	Mar. 12	Mar. 26
	Luna.....				
	Monty.....	Mar. 12	Mar. 12 - Mar. 19	Mar. 19	Mar. 26
	*Reveille.....				
	*Ostosa.....				
	*Chris Columbus.....				
	*Gardenia.....				
	*Moonlight.....				
	*Yel. Chris Columbus..				
	Blazing Gold.....				
	Georgia.....	Mar. 19	Mar. 19 - Mar. 26	Mar. 26	Apr. 2
	Red Ethrelda.....				
	*Radiance.....				
	*W. P. Snyder.....				
	Ethrelda.....				
	*Cupid.....				
	*Joybringer.....				
	*Spellbound.....				
	Sunburst.....	Mar. 26	None	Apr. 2	Apr. 2

*Recommended to follow with second tip pinch within three weeks.

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
MAY 28, 1957	Bonnaffon Deluxe	Mar. 5	Mar. 5 - Mar. 12	Mar. 12	Mar. 12
	Wilson's White Delaware	Mar. 5	Mar. 5 - Mar. 19	Mar. 12	Mar. 19
	Pacesetter	Mar. 12	None	Mar. 19	Mar. 19
	Portrait				
	Humdinger				
	Criterion				
	Queen's Lace	Mar. 12	None	1st Mar. 19	Mar. 19
	Gold Lace			2nd Apr. 16	
	Illini Snowdrift				
	Alaska				
	Granite State	Mar. 12	Mar. 12 - Mar. 26	Mar. 19	Mar. 26
	Luna				
	Monty	Mar. 19	Mar. 19 - Mar. 26	Mar. 26	Mar. 26
	*Reveille				
	*Ostosa	Mar. 26	Mar. 26 - Apr. 2	Apr. 2	Apr. 2
	*Chris Columbus				
	*Gardenia				
	*Moonlight				
	*Yel. Chris Columbus				
	Blazing Gold				
	Georgia				
	Red Ethrelda				
	*Radiance				
	*W. P. Snyder				
	Ethrelda				
	*Cupid				
	*Joybringer				
	*Spellbound				
	Sunburst	Apr. 2	None	Apr. 9	Apr. 2
JUNE 4, 1956	Bonnaffon Deluxe	Mar. 12	Mar. 12 - Mar. 19	Mar. 19	Mar. 19
	Pacesetter	Mar. 19	None	Mar. 26	Mar. 26
	Portrait				
	Humdinger				
	Criterion				
	Queen's Lace	Mar. 19	None	1st Mar. 26	Mar. 26
	Gold Lace			2nd Apr. 23	
	Illini Snowdrift				
	Alaska				
	Granite State	Mar. 19	Mar. 19 - Apr. 2	Mar. 26	Apr. 2
	Luna				
	Wilson's White				
	Monty	Mar. 26	Mar. 26 - Apr. 2	Apr. 2	Apr. 2
	Gardenia	Apr. 2	Apr. 2 - Apr. 9	Apr. 9	Apr. 9
	Blazing Gold				
	Georgia				
	Ethrelda				
	Sunburst	Apr. 9	None	Apr. 16	Apr. 9

*Recommended to follow with second tip pinch within three weeks.

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
JUNE 11, 1956	Bonnaffon Deluxe	Mar. 19	Mar. 19 - Mar. 26	Mar. 26	Mar. 26
	Pacesetter				
	Portrait				
	Humdinger	Mar. 26	None	Apr. 2	Apr. 2
	Criterion				
	Queen's Lace				
	Gold Lace	Mar. 26	None	1st Apr. 2	Apr. 2
	Illini Snowdrift			2nd Apr. 30	
	Alaska				
	Granite State				
JUNE 18, 1956	Luna	Mar. 26	Mar. 26 - Apr. 9	Apr. 2	Apr. 9
	Wilson's White				
	Monty	Apr. 2	Apr. 2 - Apr. 9	Apr. 9	Apr. 9
	Gardenia				
	Blazing Gold				
	Georgia	Apr. 9	Apr. 9 - Apr. 16	Apr. 16	Apr. 16
	Eihrelda				
	Sunburst	Apr. 16	None	Apr. 23	Apr. 16
	Bonnaffon Deluxe	Mar. 26	Mar. 26 - Apr. 2	Apr. 2	Apr. 2
	Pacesetter				
JUNE 18, 1956	Portrait				
	Humdinger	Apr. 2	None	Apr. 9	Apr. 9
	Criterion				
	Queen's Lace				
	Gold Lace	Apr. 2	None	1st Apr. 9	
	Illini Snowdrift			2nd May 7	Apr. 9
	Alaska				
	Granite State				
	Luna	Apr. 2	Apr. 2 - Apr. 16	Apr. 9	Apr. 16
	Wilson's White				
JUNE 18, 1956	Monty	Apr. 9	Apr. 9 - Apr. 16	Apr. 16	Apr. 16
	Gardenia				
	Blazing Gold				
	Georgia	Apr. 16	Apr. 16 - Apr. 23	Apr. 23	Apr. 23
	Eihrelda				
	Sunburst	Apr. 23	None	Apr. 30	Apr. 23

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
JUNE 25, 1956	Bonnaffon Deluxe	Apr. 2	Apr. 2 - Apr. 9	Apr. 9	Apr. 9
	Pacesetter				
	Portrait				
	Humdinger	Apr. 9	None	Apr. 16	Apr. 16
	Criterion				
	Queen's Lace				
	Gold Lace	Apr. 9	None	1st Apr. 16	
	Illini Snowdrift			2nd May 14	Apr. 16
	Alaska				
	Granite State				
	Luna	Apr. 9	Apr. 9 - Apr. 23	Apr. 16	Apr. 23
	Wilson's White				
	Monty	Apr. 16	Apr. 16 - Apr. 23	Apr. 23	Apr. 23
	Gardenia				
JULY 2, 1956	Blazing Gold				
	Georgia	Apr. 23	Apr. 23 - Apr. 30	Apr. 30	Apr. 30
	Ethrelda				
	Sunburst	Apr. 30	None	May 7	Apr. 30
	Bonnaffon Deluxe	Apr. 9	Apr. 9 - Apr. 16	Apr. 16	Apr. 16
	Pacesetter				
	Portrait				
	Humdinger	Apr. 16	None	Apr. 23	Apr. 23
	Luna				
	Wilson's White	Apr. 16	Apr. 16 - Apr. 30	Apr. 23	Apr. 30
	Monty	Apr. 23	Apr. 23 - Apr. 30	Apr. 30	Apr. 30
	Gardenia				
	Blazing Gold				
	Georgia	Apr. 30	Apr. 30 - May 7	May 7	May 7
JULY 9, 1956	Sunburst	May 7	None	May 14	May 7
	Bonnaffon Deluxe	Apr. 16	Apr. 16 - Apr. 23	Apr. 23	Apr. 23
	Pacesetter				
	Portrait				
	Humdinger	Apr. 23	None	Apr. 30	Apr. 30
	Luna				
	Wilson's White	Apr. 23	Apr. 23 - May 7	Apr. 30	May 7
	Monty	Apr. 30	Apr. 30 - May 7	May 7	May 7
	Gardenia				
	Blazing Gold				
	Georgia	May 7	May 7 - May 14	May 14	May 14
	Sunburst	May 14	None	May 21	May 14
	Bonnaffon Deluxe	Apr. 23	Apr. 23 - Apr. 30	Apr. 30	Apr. 30
	Pacesetter				
	Portrait				
JULY 16, 1956	Humdinger	Apr. 30	None	May 7	May 7
	Luna				
	Wilson's White	Apr. 30	Apr. 30 - May 14	May 7	May 14
	Monty	May 7	May 7 - May 14	May 14	May 14
	Gardenia				
	Blazing Gold				
	Georgia	May 14	May 14 - May 21	May 21	May 21
	Sunburst	May 21	None	May 28	May 21

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Pinch	Shade
JULY 23, 1956	Bonnaffon Deluxe	Apr. 30	May 7	May 7
	Pacesetter			
	Portrait	May 7	May 21	May 14
	Humdinger			
	Luna	May 7	May 14	May 21
	Wilson's White			
	Monty	May 14	May 21	May 21
JULY 30, 1956	Gardenia			
	Blazing Gold	May 21	May 28	May 28
	Georgia			
	Sunburst	May 28	June 4	May 28
	Bonnaffon Deluxe	May 7	May 14	May 14
	Pacesetter			
	Portrait	May 14	May 28	May 21
AUGUST 6, 1956	Humdinger			
	Luna	May 14	May 21	May 28
	Wilson's White			
	Monty	May 21	May 28	May 28
	Gardenia			
	Blazing Gold	May 28	June 4	June 4
	Georgia			
AUGUST 13, 1956	Sunburst	June 4	June 11	June 4
	Bonnaffon Deluxe	May 14	May 21	May 21
	Pacesetter			
	Portrait	May 21	June 4	May 28
	Humdinger			
	Luna	May 21	May 28	June 4
	Wilson's White			
AUGUST 13, 1956	Monty	May 28	June 4	June 4
	Gardenia			
	Blazing Gold	June 4	June 11	June 11
	Georgia			
	Sunburst	June 11	June 18	June 11
	Bonnaffon Deluxe	May 21	May 28	May 28
	Pacesetter			
AUGUST 13, 1956	Portrait	May 28	June 11	June 4
	Humdinger			
	Luna	May 28	June 4	June 11
	Wilson's White			
	Monty	June 4	June 11	June 11
	Gardenia			
	Blazing Gold	June 11	June 18	June 18
AUGUST 13, 1956	Georgia			
	Sunburst	June 18	June 25	June 18

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	6" pot Plant 5 or 6 cuttings in	Pinch	Shade
AUGUST 20, 1956	Bonnaffon Deluxe	May 28	June 4	June 4
	Pacesetter			
	Portrait	June 4	June 18	June 11
	Humdinger			
	Luna	June 4	June 11	June 18
	Wilson's White			
	Monty	June 11	June 18	June 18
	Gardenia			
AUGUST 27, 1956	Blazing Gold	June 18	June 25	June 25
	Georgia			
	Sunburst	June 25	July 2	June 25
	Bonnaffon Deluxe	June 4	June 11	June 4
	Pacesetter			
	Portrait	June 11	June 25	June 18
	Humdinger			
	Luna	June 11	June 18	June 25
AUGUST 27, 1956	Wilson's White			
	Monty	June 18	June 25	June 25
	Gardenia			
	Blazing Gold	June 25	July 2	July 2
	Georgia			
	Sunburst	July 2	July 9	July 2
	Bonnaffon Deluxe	June 11	June 18	June 11
	Delaware	June 11	June 18	June 25
SEPTEMBER 3, 1956	Pacesetter			
	Portrait	June 18	July 2	June 25
	Humdinger			
	Luna	June 18	June 25	July 2
	Wilson's White			
	Monty	June 25	July 2	July 2
	Gardenia			
	Blazing Gold	July 2	July 9	July 9
SEPTEMBER 10, 1956	Georgia			
	Sunburst	July 9	July 16	July 9
	Bonnaffon Deluxe	June 18	June 25	June 18
	Delaware	June 18	June 25	July 2
	Pacesetter			
	Portrait	June 25	July 9	July 2
	Humdinger			
	Alaska	July 2	1st July 9	
SEPTEMBER 10, 1956	Royal Bronze		2nd July 30	July 9
	Luna	June 25	July 2	July 9
	Wilson's White			
	Monty	July 2	July 9	July 9
	Gardenia			
	Blazing Gold	July 9	July 16	July 16
	Georgia			
	Sunburst	July 16	July 23	July 16

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Pinch	Shade
SEPTEMBER 17, 1956	Bonnaffon Deluxe	June 25	July 2	June 25
	Delaware	June 25	July 2	July 9
	Portrait	July 2	July 9	July 9
	Humdinger			
	Criterion			
	Queen of Pinks			
	Granite State	July 2	July 9	July 16
	Luna			
	Wilson's White			
	Barbara Fuller	July 9	July 16	July 23
	Red Ethrelda			
	Ethrelda			
	Alaska	July 9	1st July 16	July 16
	Royal Bronze		2nd Aug. 6	
	Monty	July 9	July 16	July 16
SEPTEMBER 24, 1956	Gardenia	July 16	July 23	July 23
	Blazing Gold			
	Georgia			
	Sunburst	July 23	July 30	July 23
	Bonnaffon Deluxe	July 2	July 9	July 2
	Delaware	July 2	July 9	July 16
	Portrait	July 9	July 16	July 16
	Humdinger			
	Criterion			
	Queen of Pinks			
	Granite State	July 9	July 16	July 23
	Luna			
	Wilson's White			
	Barbara Fuller	July 16	July 23	July 30
	Red Ethrelda			
	Ethrelda			
	Alaska	July 16	1st July 23	July 23
	Royal Bronze		2nd Aug. 13	
	Monty	July 16	July 23	July 23
	Gardenia	July 23	July 30	July 30
	Blazing Gold			
	Georgia			
	Sunburst	July 30	Aug. 6	July 30

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Pinch	Shade
OCTOBER 1, 1956	Bonnaffon Deluxe.....	July 9	July 16	July 9
	Delaware.....	July 9	July 16	July 23
	Portrait.....	July 16	July 23	July 23
	Humdinger.....			
	Criterion.....			
	Queen of Pinks.....			
	Granite State.....	July 16	July 23	July 30
	Luna.....			
	Wilson's White.....			
	Barbara Fuller.....	July 23	July 30	Aug. 6
	Red Ethrelda.....			
	Ethrelda.....			
	Alaska.....	July 23	1st July 30	July 30
	Royal Bronze.....		2nd Aug. 20	
OCTOBER 8, 1956	Monty.....	July 23	July 30	July 30
	Gardenia.....	July 30	Aug. 6	Aug. 6
	Blazing Gold.....			
	Georgia.....			
	Sunburst.....	Aug. 6	Aug. 13	Aug. 6
	Bonnaffon Deluxe.....	July 16	July 23	July 16
	Delaware.....	July 16	July 23	July 30
	Portrait.....	July 23	July 30	July 30
	Humdinger.....			
	Criterion.....			
	Queen of Pinks.....			
	Granite State.....	July 23	July 30	Aug. 6
	Luna.....			
	Wilson's White.....			
	Barbara Fuller.....	July 30	Aug. 6	Aug. 13
	Red Ethrelda.....			
	Ethrelda.....			
	Alaska.....	July 30	1st Aug. 6	Aug. 6
	Royal Bronze.....		2nd Aug. 27	
	Monty.....	July 30	Aug. 6	Aug. 6
	Gardenia.....	Aug. 6	Aug. 13	Aug. 13
	Blazing Gold.....			
	Georgia.....			
	Sunburst.....	Aug. 13	Aug. 20	Aug. 13

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
OCTOBER 15, 1956	Bonnaffon Deluxe	July 23	None	July 30	July 23
	Delaware	July 23	None	July 30	Aug. 6
	Portrait Humdinger Criterion Queen of Pinks	July 30	None	Aug. 6	Aug. 6
	Granite State Luna Wilson's White	July 30	July 30 - Aug. 13	Aug. 6	Aug. 13
	Barbara Fuller Red Ethrelda Ethrelda	Aug. 6	Aug. 6 - Aug. 20	Aug. 13	Aug. 20
	Queen's Lace Alaska Royal Bronze	Aug. 6	None	1st Aug. 13 2nd Sept. 3	Aug. 13
	Monty	Aug. 6	Aug. 6 - Aug. 13	Aug. 13	Aug. 13
	Blazing Gold Georgia	Aug. 13	Aug. 13 - Aug. 20	Aug. 20	Aug. 20
	Sunburst	Aug. 20	None	Aug. 27	Aug. 20
OCTOBER 22, 1956	Bonnaffon Deluxe	July 30	None	Aug. 6	Aug. 6
	Delaware	July 30	July 30 - Aug. 13	Aug. 6	Aug. 13
	Portrait Humdinger Criterion Queen of Pinks	Aug. 6	Aug. 6 - Aug. 13	Aug. 13	Aug. 13
	Granite State Luna Wilson's White	Aug. 6	Aug. 6 - Aug. 20	Aug. 13	Aug. 20
	Barbara Fuller Red Ethrelda Ethrelda	Aug. 13	Aug. 13 - Aug. 27	Aug. 20	Aug. 27
	Queen's Lace Alaska Royal Bronze	Aug. 13	Aug. 13 - Aug. 20	1st Aug. 20 2nd Sept. 10	Aug. 20
	Monty	Aug. 13	Aug. 13 - Aug. 20	Aug. 20	Aug. 20
	Blazing Gold Georgia	Aug. 20	Aug. 20 - Aug. 27	Aug. 27	Aug. 27
	Sunburst	Aug. 20	Aug. 20 - Aug. 27	Sept. 3	Aug. 27

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
OCTOBER 29, 1956	Bonnaffon Deluxe	Aug. 6	None	Aug. 13	Aug. 13
	Delaware	Aug. 6	Aug. 6 - Aug. 20	Aug. 13	Aug. 20
	Portrait Humdinger Criterion Queen of Pinks	Aug. 13	Aug. 13 - Aug. 20	Aug. 20	Aug. 20
	Granite State Luna Wilson's White	Aug. 13	Aug. 13 - Aug. 27	Aug. 20	Aug. 27
	Barbara Fuller Red Ethrelda Ethrelda	Aug. 20	Aug. 20 - Sept. 3	Aug. 27	Sept. 3
	Queen's Lace Gold Lace Alaska Royal Bronze	Aug. 20	Aug. 20 - Aug. 27	1st Aug. 27 2nd Sept. 17	Aug. 27
	Monty	Aug. 20	Aug. 20 - Aug. 27	Aug. 27	Aug. 27
	Blazing Gold Georgia	Aug. 27	Aug. 27 - Sept. 3	Sept. 3	Sept. 3
	Sunburst	Aug. 27	Aug. 27 - Sept. 3	Sept. 10	Sept. 3
	Bonnaffon Deluxe	Aug. 13	Aug. 13 - Aug. 20	Aug. 20	Aug. 20
	Delaware	Aug. 13	Aug. 13 - Aug. 27	Aug. 20	Aug. 27
	Portrait Humdinger Criterion Queen of Pinks	Aug. 20	Aug. 20 - Aug. 27	Aug. 27	Aug. 27
	Granite State Luna Wilson's White	Aug. 20	Aug. 20 - Sept. 3	Aug. 27	Sept. 3
	Barbara Fuller Red Ethrelda Ethrelda	Aug. 27	Aug. 27 - Sept. 10	Sept. 3	no
NOVEMBER 5, 1956	Queen's Lace Gold Lace Alaska Royal Bronze	Aug. 27	Aug. 27 - Sept. 3	1st Sept. 3 2nd Sept. 24	Sept. 3
	Monty	Aug. 27	Aug. 27 - Sept. 3	Sept. 3	Sept. 3
	Blazing Gold Georgia	Sept. 3	Sept. 3 - Sept. 10	Sept. 10	no
	Sunburst	Sept. 3	Sept. 3 - Sept. 10	Sept. 17	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
NOVEMBER 12, 1956	Bonnaffon Deluxe	Aug. 20	Aug. 20 - Aug. 27	Aug. 27	Aug. 27
	Delaware	Aug. 20	Aug. 20 - Sept. 3	Aug. 27	Sept. 3
	Portrait	Aug. 27	Aug. 27 - Sept. 3	Sept. 3	Sept. 3
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Aug. 27	Aug. 27 - Sept. 10	Sept. 3	no
	Luna				
	Wilson's White				
	Barbara Fuller	Sept. 3	Sept. 3 - Sept. 20	Sept. 13	no
	Red Ethrelda				
	Ethrelda				
	Queen's Lace	Sept. 3	Sept. 3 - Sept. 13	1st Sept. 13 2nd Oct. 11	no
	Gold Lace				
	Alaska				
	Royal Bronze				
NOVEMBER 19, 1956	Monty	Sept. 3	Sept. 3 - Sept. 13	Sept. 13	no
	Blazing Gold	Sept. 10	Sept. 10 - Sept. 20	Sept. 20	no
	Georgia				
	Sunburst	Sept. 10	Sept. 10 - Sept. 20	Sept. 27	no
	Bonnaffon Deluxe	Aug. 27	Aug. 27 - Sept. 3	Sept. 3	Sept. 3
	Delaware	Aug. 27	Aug. 27 - Sept. 10	Sept. 3	Sept. 10
	Portrait	Sept. 3	Sept. 3 - Sept. 13	Sept. 13	Sept. 13
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Sept. 3	Sept. 3 - Sept. 20	Sept. 13	no
	Luna				
	Wilson's White				
	Barbara Fuller	Sept. 10	Sept. 10 - Sept. 27	Sept. 20	no
	Red Ethrelda				
	Ethrelda				
	Queen's Lace	Sept. 10	Sept. 10 - Sept. 20	1st Sept. 20 2nd Oct. 18	no
	Gold Lace				
	Alaska				
	Royal Bronze				
	Monty	Sept. 10	Sept. 10 - Sept. 20	Sept. 20	no
	Blazing Gold	Sept. 17	Sept. 17 - Sept. 27	Sept. 27	no
	Georgia				
	Sunburst	Sept. 17	Sept. 17 - Sept. 27	Oct. 4	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
NOVEMBER 26, 1956	White Lady	Aug. 27	Aug. 27 - Sept. 3	Sept. 10	Sept. 3
	Beautiful Lady				
	Cheerio	Sept. 3	Sept. 3 - Sept. 10	Sept. 17	Sept. 13
	Illini War Paint				
	Bonnafton Deluxe	Sept. 3	Sept. 3 - Sept. 13	Sept. 13	Sept. 13
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Sept. 3	Sept. 3 - Sept. 20	Sept. 13	no
	Pacesetter	Sept. 10	Sept. 10 - Sept. 20	Sept. 20	no
	Little America				
	Portrait				
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Sept. 10	Sept. 10 - Sept. 27	Sept. 20	no
	Luna				
	Wilson's White				
	Barbara Fuller	Sept. 17	Sept. 17 - Oct. 4	Sept. 27	no
	Red Ethrelda				
	Ethrelda				
	Queen's Lace	Sept. 17	Sept. 17 - Sept. 27	1st Sept. 27 2nd Oct. 25	no
	Gold Lace				
	Royal Bronze				
	Monty	Sept. 17	Sept. 17 - Sept. 27	Sept. 27	no
	Sunburst	Sept. 24	Sept. 24 - Oct. 4	Oct. 11	no
DECEMBER 3, 1956	Illini War Paint	Sept. 10	Sept. 10 - Sept. 17	Sept. 24	no
	Bonnafton Deluxe	Sept. 10	Sept. 10 - Sept. 20	Sept. 20	no
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Sept. 10	Sept. 10 - Sept. 27	Sept. 20	no
	Pacesetter	Sept. 17	Sept. 17 - Sept. 27	Sept. 27	no
	Little America				
	Portrait				
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Sept. 17	Sept. 17 - Oct. 4	Sept. 27	no
	Luna				
	Wilson's White				
	Queen's Lace	Sept. 24	Sept. 24 - Oct. 4	1st Oct. 4 2nd Nov. 1	no
	Gold Lace				
	Monty	Sept. 24	Sept. 24 - Oct. 4	Oct. 4	no
	Sunburst	Oct. 1	Oct. 1 - Oct. 11	Oct. 18	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
DECEMBER 10, 1956	Illini War Paint	Sept. 17	Sept. 17 - Sept. 24	Oct. 1	no
	Bonnaffon Deluxe	Sept. 17	Sept. 17 - Sept. 27	Sept. 27	no
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Sept. 10	Sept. 10 - Oct. 1	Sept. 24	no
	Pacesetter	Sept. 17	Sept. 17 - Oct. 1	Oct. 1	no
	Little America				
	Portrait				
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Sept. 17	Sept. 17 - Oct. 8	Oct. 1	no
	Luna				
	Wilson's White				
	Queen's Lace	Sept. 24	Sept. 24 - Oct. 8	1st Oct. 8	no
	Gold Lace			2nd Nov. 5	
	Monty	Sept. 24	Sept. 24 - Oct. 8	Oct. 8	no
	Sunburst	Oct. 1	Oct. 1 - Oct. 15	Oct. 22	no
DECEMBER 17, 1956	Illini War Paint	Sept. 24	Sept. 24 - Oct. 1	Oct. 8	no
	Bonnaffon Deluxe	Sept. 17	Sept. 17 - Oct. 1	Oct. 1	no
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Sept. 17	Sept. 17 - Oct. 8	Oct. 1	no
	Pacesetter	Sept. 24	Sept. 24 - Oct. 8	Oct. 8	no
	Little America				
	Portrait				
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Sept. 24	Sept. 24 - Oct. 15	Oct. 8	no
	Luna				
	Wilson's White				
	Queen's Lace	Oct. 1	Oct. 1 - Oct. 15	1st Oct. 15	no
	Gold Lace			2nd Nov. 12	
	Monty	Oct. 1	Oct. 1 - Oct. 15	Oct. 15	no
	Sunburst	Oct. 8	Oct. 8 - Oct. 22	Oct. 29	no

Year-Around Pot Plant Schedule

ONE-PINCH METHOD

Flower	Varieties	Plant 5 or 6 cuttings in 6" pot	Lighting Period	Pinch	Shade
DECEMBER 24, 1956	Illini War Paint	Oct. 1	Oct. 1 - Oct. 8	Oct. 15	no
	Bonnaffon Deluxe	Sept. 24	Sept. 24 - Oct. 8	Oct. 8	no
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Sept. 24	Sept. 24 - Oct. 15	Oct. 8	no
	Pacesetter	Oct. 1	Oct. 1 - Oct. 15	Oct. 15	no
	Little America				
	Portrait				
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Oct. 1	Oct. 1 - Oct. 22	Oct. 15	no
	Luna				
	Wilson's White				
	Queen's Lace	Oct. 1	Oct. 1 - Oct. 15	1st Oct. 22 2nd Nov. 19	no
	Gold Lace				
DECEMBER 31, 1956	Monty	Oct. 8	Oct. 8 - Oct. 22	Oct. 22	no
	Sunburst	Oct. 15	Oct. 15 - Oct. 29	Nov. 5	no
	Bonnaffon Deluxe	Oct. 1	Oct. 1 - Oct. 15	Oct. 15	no
	Calvert's Gold				
	Calvert's Pink				
	Delaware	Oct. 1	Oct. 1 - Oct. 22	Oct. 15	no
	Portrait	Oct. 8	Oct. 8 - Oct. 22	Oct. 22	no
	Humdinger				
	Criterion				
	Queen of Pinks				
	Granite State	Oct. 8	Oct. 8 - Oct. 29	Oct. 22	no
	Luna				
	Wilson's White				
	Queen's Lace	Oct. 8	Oct. 8 - Oct. 22	1st Oct. 29 2nd Nov. 26	no
	Gold Lace				
	Pacesetter	Oct. 15	Oct. 15 - Oct. 22	Oct. 29	no
	Little America				
	Indianapolis White				
	Dark Ind. Yellow				
	Indianapolis Pink				
	Monty	Oct. 15	Oct. 15 - Oct. 29	Oct. 29	no
	Sunburst	Oct. 22	Oct. 22 - Nov. 5	Nov. 12	no

Year-Around Flowering of Chrysanthemums



A dozen short disbuds ready for market

SHORT DISBUD CULTURE

The short disbuds have many uses in floral design and have met with favor among the retailers. A square foot of bench may produce twelve blooms with 24 to 30-inch stems in twelve to fifteen weeks, depending on the time of year. The "Mini-Mums" are packed in flat carnation packs with twelve blooms per bunch.

Cuttings are benched directly and spaced 6 x 6 inches, with three stems per plant, or 6 x 4 inches, with two stems per plant. During the winter, the closer spacing with two stems per plant may be advisable because it is difficult to get three heavy breaks at this season. Apply one to three weeks of long days before soft pinching. This culture is very similar to pot plant culture. Consult the schedule for the correct number of long days weeks before starting short day treatment.

All other cultural factors should be similar to year-around flowering. Remember this is a 60-degree crop. However, after color shows, drop the temperature to 55 degrees whenever possible. Depending on the distance of planting, sucker the shoots to two or three stems. After the buds are fairly large, disbud each stem to one flower. The best varieties for each response group will be found on the year-round schedule.



Short disbuds spaced 6 x 6 inches produce twelve blooms per square foot

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Lighting Period	Start Shade	Response Group
January 7, 1957	Sept. 17	Oct. 8	Sept. 17—Oct. 15	no	12 Week
			Sept. 17—Oct. 22	no	11 Week
			Sept. 17—Oct. 29	no	10 Week
January 14, 1957	Sept. 17	Oct. 8	Sept. 17—Oct. 22	no	12 Week
			Sept. 17—Oct. 29	no	11 Week
			Sept. 17—Nov. 5	no	10 Week
January 21, 1957	Sept. 24	Oct. 15	Sept. 24—Oct. 29	no	12 Week
			Sept. 24—Nov. 5	no	11 Week
			Sept. 24—Nov. 12	no	10 Week
January 28, 1957	Oct. 1	Oct. 22	Oct. 1—Nov. 5	no	12 Week
			Oct. 1—Nov. 12	no	11 Week
			Oct. 1—Nov. 19	no	10 Week
February 4, 1957	Oct. 8	Oct. 29	Oct. 8—Nov. 12	no	12 Week
			Oct. 8—Nov. 19	no	11 Week
			Oct. 8—Nov. 26	no	10 Week
February 11, 1957	Oct. 15	Nov. 5	Oct. 15—Nov. 19	no	12 Week
			Oct. 15—Nov. 26	no	11 Week
			Oct. 15—Dec. 3	no	10 Week
February 18, 1957	Oct. 22	Nov. 12	Oct. 22—Nov. 26	no	12 Week
			Oct. 22—Dec. 3	no	11 Week
			Oct. 22—Dec. 10	no	10 Week
February 25, 1957	Oct. 29	Nov. 19	Oct. 29—Dec. 3	no	12 Week
			Oct. 29—Dec. 10	no	11 Week
			Oct. 29—Dec. 17	no	10 Week

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week
WHITE	White Peter John White Valencia December Glory	White Norma L. I. Beauty Belray Marketeer	Iceberg Shasta Cream Shasta Ind. White
YELLOW	Yellow Peter John Yellow Glory	Yel. L. I. Beauty Susanne Miller Yellow Marketeer	Yellow Shasta Imp. Ind. Yellow Ind. Yellow
BRONZE & RED	Br. Peter John	Calvert's Gold	Copperhead Ind. Bronze Ind. Apricot Dk. Ind. Bronze
PINK	Dk. Pk. Peter John Ed. Seidewitz Orchid Valencia	Almega Dk. Pk. L. I. Beauty Calvert's Pink Thanks. Pink	Portrait Ind. Pink

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Lighting Period	Start Shade	Response Group
March 4, 1957	Nov. 5	Nov. 26	Nov. 5 —Dec. 10	no	12 Week
			Nov. 5 —Dec. 17	no	11 Week
			Nov. 5 —Dec. 24	no	10 Week
March 11, 1957	Nov. 12	Dec. 3	Nov. 12—Dec. 17	no	12 Week
			Nov. 12—Dec. 24	no	11 Week
			Nov. 12—Dec. 31	no	10 Week
March 18, 1957	Nov. 19	Dec. 10	Nov. 19—Dec. 24	no	12 Week
			Nov. 19—Dec. 31	no	11 Week
			Nov. 19—Jan. 7	no	10 Week
March 25, 1957	Nov. 26	Dec. 17	Nov. 26—Dec. 31	no	12 Week
			Nov. 26—Jan. 7	no	11 Week
			Nov. 26—Jan. 14	no	10 Week
April 1, 1957	Dec. 3	Dec. 24	Dec. 3 —Jan. 7	no	12 Week
			Dec. 3 —Jan. 14	no	11 Week
			Dec. 3 —Jan. 21	no	10 Week
April 8, 1957	Dec. 17	Jan. 7	Dec. 17—Jan. 21	no	11 Week
			Dec. 17—Jan. 28	no	10 Week
			Dec. 17—Feb. 4	no	9 Week
April 16, 1956	Jan. 2	Jan. 23	Jan. 2 —Jan. 30	Mar. 12	11 Week
			Jan. 2 —Feb. 6	Mar. 19	10 Week
			Jan. 2 —Feb. 13	Mar. 26	9 Week
April 23, 1956	Jan. 9	Jan. 30	Jan. 9 —Feb. 6	Mar. 12	11 Week
			Jan. 9 —Feb. 13	Mar. 19	10 Week
			Jan. 9 —Feb. 20	Mar. 26	9 Week
April 30, 1956	Jan. 23	Feb. 13	Jan. 23—Feb. 20	Mar. 19	10 Week
			Jan. 23—Feb. 27	Mar. 26	9 Week
			Jan. 23—Mar. 5	Apr. 2	8 Week

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week	9 Week	8 Week
WHITE	Illini Glacier	White Norma L. I. Beauty Belray Marketeer	Iceberg Shasta Cream Shasta Ind. White	Alaska Queen's Lace	
YELLOW	Illini Wampum	Yel. L. I. Beauty Susanne Miller Yel. Marketeer Sultan	Yellow Shasta Imp. Ind. Yel. Ind. Yellow	Luyona Yel. Ivanhoe Gold Lace Yellow Lace	Harvest Golden Sunburst
BRONZE & RED		Calvert's Gold	Copperhead Paragon Ind. Bronze Ind. Apricot Dk. Ind. Bronze	Ivanhoe	Amber Bright
PINK		Dark Norma Almega Delmar Dk. Pk. L. I. B'ty	Portrait Ind. Pink		

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Lighting Period	Start Shade	Response Group
May 7, 1956	Jan. 30	Feb. 20	Jan. 30—Feb. 27	Mar. 19	10 Week
			Jan. 30—Mar. 5	Mar. 26	9 Week
			Jan. 30—Mar. 12	Apr. 2	8 Week
May 14, 1956	Feb. 13	Mar. 5	Feb. 13—Mar. 5	Mar. 19	10 Week
			Feb. 13—Mar. 12	Mar. 26	9 Week
			Feb. 13—Mar. 19	Apr. 2	8 Week
May 21, 1956	Feb. 20	Mar. 12	Feb. 20—Mar. 12	Mar. 19	10 Week
			Feb. 20—Mar. 19	Mar. 26	9 Week
			Feb. 20—Mar. 26	Apr. 2	8 Week
May 28, 1956	Mar. 5	Mar. 19	Mar. 5—Mar. 19	Mar. 19	10 Week
			Mar. 5—Mar. 26	Mar. 26	9 Week
			Mar. 5—Apr. 2	Apr. 2	8 Week
June 4, 1956	Mar. 12	Mar. 26	Mar. 12—Mar. 26	Mar. 26	10 Week
			Mar. 12—Apr. 2	Apr. 2	9 Week
			Mar. 12—Apr. 9	Apr. 9	8 Week
June 11, 1956	Mar. 19	Apr. 2	Mar. 19—Apr. 2	Apr. 2	10 Week
			Mar. 19—Apr. 9	Apr. 9	9 Week
			Mar. 19—Apr. 16	Apr. 16	8 Week
June 18, 1956	Mar. 26	Apr. 9	Mar. 26—Apr. 9	Apr. 9	10 Week
			Mar. 26—Apr. 16	Apr. 16	9 Week
			Mar. 26—Apr. 23	Apr. 23	8 Week
June 25, 1956	Apr. 2	Apr. 16	Apr. 2—Apr. 16	Apr. 16	10 Week
			Apr. 2—Apr. 23	Apr. 23	9 Week
			Apr. 2—Apr. 30	Apr. 30	8 Week

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	Whitlop Iceberg Shasta Cream Shasta Ind. White	Marblehead Alaska Queen Lace	
YELLOW	Yellow Beauty Yellow Shasta Imp. Ind. Yellow Ind. Yellow	Golden Herald Gondola Luyona Good News Yellow Ivanhoe Gold Lace	Harvest Golden Sunburst Blazing Gold
BRONZE & RED	Copperhead Dk. Ind. Bronze	Detroit News Ivanhoe	Mayford's Triumph Amber Bright
PINK	Portrait Pennant Pandora Ind. Pink Humdinger	Bluechip Mary Garden	

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Lighting Period	Start Shade	Response Group
July 2, 1956	Apr. 9	Apr. 23	Apr. 9 —Apr. 23	Apr. 23	10 Week
			Apr. 9 —Apr. 30	Apr. 30	9 Week
			Apr. 9 —May 7	May 7	8 Week
July 9, 1956	Apr. 16	Apr. 30	Apr. 16—Apr. 30	Apr. 30	10 Week
			Apr. 16—May 7	May 7	9 Week
			Apr. 16—May 14	May 14	8 Week
July 16, 1956	Apr. 23	May 7	Apr. 23—May 7	May 7	10 Week
			Apr. 23—May 14	May 14	9 Week
			Apr. 23—May 21	May 21	8 Week
July 23, 1956	Apr. 30	May 14	Apr. 30—May 14	May 14	10 Week
			Apr. 30—May 21	May 21	9 Week
			Apr. 30—May 28	May 28	8 Week
July 30, 1956	May 14	May 21	May 14—May 21	May 21	10 Week
			May 14—May 28	May 28	9 Week
			May 14—June 4	June 4	8 Week
August 6, 1956	May 21	May 28	No Light Necessary	May 28	10 Week
				June 4	9 Week
				June 11	8 Week
August 13, 1956	May 28	June 4	No Light Necessary	June 4	10 Week
				June 11	9 Week
				June 18	8 Week
August 20, 1956	June 4	June 11	No Light Necessary	June 11	10 Week
				June 18	9 Week
				June 25	8 Week
August 27, 1956	June 11	June 18	No Light Necessary	June 18	10 Week
				June 25	9 Week
				July 2	8 Week

VARIETIES IN RESPONSE GROUPS

	10 Week	9 Week	8 Week
WHITE	Whitetop Iceberg Shasta Cream Shasta Ind. White	Marblehead Alaska Queen's Lace Wh. Mary Garden	
YELLOW	Crescendo Luxury Yellow Shasta Imp. Ind. Yellow Ind. Yellow	Golden Herald Gondola Luyona Good News Yellow Ivanhoe Gold Lace	Harvest Golden Celestra Sunburst Blazing Gold Amber Bright
PINK	Portrait Pennant Humdinger	Bluechip	

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Start Shade	Response Group
September 3, 1956	June 18	June 25	June 25 July 2 July 9	10 Week 9 Week 8 Week
September 10, 1956	June 25	July 2	July 2 July 9 July 16	10 Week 9 Week 8 Week
September 17, 1956	July 2	July 9	July 9 July 16 July 23	10 Week 9 Week 8 Week
September 24, 1956	July 2	July 9	July 9 July 16 July 23	11 Week 10 Week 9 Week
October 1, 1956	July 9	July 16	July 16 July 23 July 30	11 Week 10 Week 9 Week
October 8, 1956	July 16	July 23	July 23 July 30 Aug. 6	11 Week 10 Week 9 Week
October 15, 1956	July 23	July 30	July 30 Aug. 6	11 Week 10 Week
October 22, 1956	July 23	Aug. 6	Aug. 6 Aug. 13	11 Week 10 Week
October 29, 1956	July 30	Aug. 13	Aug. 13 Aug. 20	11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	11 Week	10 Week	9 Week	8 Week
WHITE	Belray	Whitetop Iceberg Shasta Cream Shasta Ind. White	Marblehead Alaska Wh. Mary Garden Queen's Lace	
YELLOW	Illini Goldilocks Sultan	Crescendo Luxury Yellow Shasta Imp. Ind. Yellow Ind. Yellow	Golden Herald Gondola Luyona Good News Yellow Ivanhoe Gold Lace	Harvest Golden Celestra Sunburst Blazing Gold
BRONZE & RED	Olnura Illini Warpaint	The Titan Br. Pandora Copperhead Ind. Bronze	Ivanhoe Detroit News	Amber Bright
PINK	Delmar Almega	Pennant Portrait Pandora Ind. Pink Humdinger	Bluechip Mary Garden	

Year-Around Short Disbuds "Mini-Mum" Schedule

Flower	Plant	Pinch	Lighting Period	Start Shade	Response Group
November 5, 1956	Aug. 6	Aug. 20	Aug. 13—Aug. 20 Aug. 8 —Aug. 27	Aug. 20 Aug. 27	11 Week 10 Week
November 12, 1956	Aug. 6	Aug. 20	No Light Necessary Aug. 13—Aug. 27 Aug. 6 —Sept. 3	Aug. 20 Aug. 27 Sept. 3	12 Week 11 Week 10 Week
November 19, 1956	Aug. 13	Aug. 27	Aug. 20—Aug. 27 Aug. 13—Sept. 3 Aug. 13—Sept. 10	Aug. 27 Sept. 3 Sept. 10	12 Week 11 Week 10 Week
November 26, 1956	Aug. 20	Sept. 3	Aug. 20—Sept. 3 Aug. 20—Sept. 10 Aug. 20—Sept. 17	Sept. 3 Sept. 10 no	12 Week 11 Week 10 Week
December 3, 1956	Aug. 20	Sept. 10	Aug. 20—Sept. 10 Aug. 20—Sept. 17 Aug. 20—Sept. 24	Sept. 10 Sept. 17 no	12 Week 11 Week 10 Week
December 10, 1956	Aug. 27	Sept. 17	Aug. 27—Sept. 17 Aug. 27—Sept. 24 Aug. 27—Oct. 1	Sept. 17 no no	12 Week 11 Week 10 Week
December 17, 1956	Aug. 27	Sept. 17	Aug. 27—Sept. 24 Aug. 27—Oct. 1 Aug. 27—Oct. 8	no no no	12 Week 11 Week 10 Week
December 24, 1956	Sept. 3	Sept. 24	Sept. 3 —Oct. 1 Sept. 3 —Oct. 8 Sept. 3 —Oct. 15	no no no	12 Week 11 Week 10 Week
December 31, 1956	Sept. 10	Oct. 1	Sept. 10—Oct. 8 Sept. 10—Oct. 15 Sept. 10—Oct. 22	no no no	12 Week 11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	12 Week	11 Week	10 Week
WHITE	Wh. Peter John White Valencia December Glory Illini Glacier	White Norma Long Island Beauty Belray Marketeer	Iceberg Shasta Cream Shasta Ind. White
YELLOW	Highlander Illini Wampum Yellow Peter John Yellow Glory Goldsmith	Yel. L. I. Beauty Illini Goldilocks Susanne Miller Yel. Marketeer	Yellow Shasta Imp. Ind. Yellow Ind. Yellow
BRONZE & RED	Bronze Goldsmith Apricot Valencia Br. Peter John	Illini Warpaint Calverf's Gold	Copperhead Paragon Ind. Bronze Ind. Apricot Dk. Ind. Bronze
PINK	Pink Peter John Ed. Seidewitz Orchid Valencia	Dark Norma Almega Dk. Pk. L. I. Beauty Calverf's Pink	Tuxedo Portrait Ind. Pink

Better Chrysanthemums

CUTTINGS

To grow good Chrysanthemums, the first requisite is to start with Verticillium wilt and stunt-free cuttings. Wilt-free cuttings are easily secured. Now with the extreme care in selecting stunt-free stock and with careful handling, we are very optimistic in stating that stunt should be practically nil in the stock for the coming season.

Handling Cuttings

The cuttings you receive have been propagated in a material containing some organic matter which naturally has some plant food. Consequently these cuttings can be planted directly into the final location. Ordinarily they will not require shading, but if they have been several days in transit and have softened up some, or if they are planted during warm, bright weather, shading with aster cloth or paper is advisable. Under no circumstances leave the covering on the plants during dull weather or at night. It is well to syringe the plants frequently until they stand up and are showing signs of growth. Some evidence shows that watering with a starter solution (weak nutrient solution) within 48 hours after planting will speed up the growth.

Deliveries

With the advent of the time pinch and the precision method of culture, it is necessary to have your cuttings arrive at a definite date. To insure proper delivery, you must plan your cutting requirements months in advance of the date wanted. We would appreciate it if you could let us know your requirements so that our

propagator can plan his growing of stock plants and cuttings even more systematically than he does.

To facilitate deliveries, cuttings will be shipped on Mondays and Tuesdays of each week.

Delays

With the reduced delivery schedule of the Railway Express Agency, there may be delays in delivering your shipments. Chrysanthemum cuttings can be injured from cold as well as being too long in transit. If the cuttings are slightly wilted, they should be immersed in water for a short period and then planted. They will react perfectly to such treatment. If the cuttings have been slightly frozen, placing them in a cool room and thawing them out gradually, or placing them in a pail of cool water to take the frost out will bring them through so that they will do just as well as cuttings that have had nothing happen to them. Of course, if stock is badly frozen, or if long delays have occurred so that the cuttings are heated, yellow or rotted, you should file a claim at once with the express company.

Air Freight

We have been very well satisfied with the use of Air Freight to deliver rooted cuttings this past season. Customers who are close to an airport are naturally served better than those who have to have their shipment reconsigned via Railway Express. If you plan to use air freight, you should have your telephone number appear on all shipping labels.



The first step in producing first-grade cuttings is in the laboratory

Cultural Pointers

SOILS

Chrysanthemums will grow in a wide range of soil types, but a fibrous silt-loam is preferred. Blue grass sod, to which rotted manure has been added, plus an application of superphosphate will give excellent results. The reason for the great care in soil preparation is to permit penetration of water and a uniform supply of fertilizer. If water remains on the surface of your soil for more than a few moments after watering, your soil is not of good structure.

Acidity

Evidence shows that the soil reaction should be slightly acid, pH 6.5, although in many instances a neutral medium does very well. If your soil tests slightly alkaline, apply one-half to one pound of agricultural sulfur per 100 sq. ft. of area. However, if your soil is acid, apply 3 to 5 pounds of agricultural ground limestone per 100 sq. ft. of area.

Steam Sterilization

Steam sterilization is the only practical means known to destroy the Verticillium wilt organisms present in many soils. The cuttings you purchase are free from wilt, but if planted in soil that is not steam sterilized, many will contract the trouble.

Old soil, when properly managed, will give results comparable to fresh soil. Add a quarter of the volume of humus in the form of manure or peat moss. Steam sterilize to destroy the Verticillium wilt fungus, as well as improve the structure of the soil. Steam sterilization may be done with the use of 3-inch tile or down spouting with one-eighth inch holes drilled every 6 inches on each side of the pipe. Use 2 lines in a three and one-half foot bench. Ridge the soil to the center of the bench directly over the lines, cover with balloon cloth or other plastic material. The Thomas method is very

similar, with the exception that the pipe is laid on top of the rototilled soil and then covered so as to make it air-tight. The Thomas method is not recommended where purlin posts are in the bench.

By introducing the steam in the center of a 100-foot bench and sending the steam in both directions, a more thorough sterilization is accomplished than if the steam were to be forced in at the end of the 100-foot bench. Cover the sides of the benches so that the entire bench and contents are heated to 180 degrees Fahrenheit. Remove the covering one hour after the steam has been cut. This allows the excess moisture to pass from the soil as vapor. We are now recommending that you plant immediately after the soil has cooled. Water in the plants heavily so that you are combining watering and leaching into one operation. Continue to water heavily every time you water.

Chemical Sterilization

A chemical which has proven its worth is Larvacide. This material must be used when the greenhouses are empty to avoid injury to adjoining crops. This gas is applied in liquid form with a special applicator so that 2 or 3 c.c. are applied at 10-inch centers. The soil should be moist before applying. A good suitable covering should be placed over the treated soil to keep the gas in the soil for at least 48 hours, although a water seal applied 2 to 3 times every 24 hours will suffice. The soil temperature should be at least 60 degrees or higher. When used properly you can expect favorable control of insects, diseases and weed seeds.

Dowfume MC 2 has been tried and found to control nematodes, weed seeds, and some damping-off organisms. Best results are obtained when the soil temperature is above 60 degrees. About the same procedure should be followed in its application as that described for Larvacide.



Sugarcane mulch prevents weeds, maintains moisture and its light color keeps soil temperature lower

Cultural Pointers

Aeration

Proper drainage and proper aeration of the soil are very vital to good growth. Many times improper drainage of the bench or bed is the reason for a poor crop. No wet spots should ever be present. Soil drainage may be improved by the addition of various materials. Any coarse organic material such as manure, alfalfa hay or peanut shells applied at a rate not to exceed one-fourth the volume will separate the soil particles sufficiently to increase pore space.

Adding several bushels of peat per 100 sq. ft. of bench area before planting and worked into the top inch of the soil will help keep the surface open and porous. Heavy applications of sand to a soil have not always proven of value to a chrysanthemum crop. Aeration may also be increased by proper cultivation of the soil.

Soil Management

Soils vary a great deal over the country, and yet many good crops of chrysanthemums are grown on all types of soil. Soil itself is not the most important factor, but soil management is of extreme importance. In considering the management of the soil, the following steps are suggested:

1. Apply a quarter of the volume of manure or other organic substitute once a year, usually just before steam sterilization. Rototill organic matter into the soil. When growing on ground beds, watch the tilling so that no impervious layer is formed which will later cause poor drainage.
2. Steam sterilize the soil to a temperature of 180 degrees Fahrenheit before planting every crop of chrysanthemums.
3. Apply 5 pounds of super phosphate per 100 sq. ft. of area once a year.
4. After each steam sterilization apply 5 pounds of gypsum (Calcium sulfate) per 100 sq. ft.
5. Test soil for acidity and make correction before planting.

6. Add several bushels of granular peat per 100 sq. ft. of area before planting and working into the top inch of the soil.
7. Plant immediately after the soil cools. Waiting a week or two will increase the soluble salts into a dangerous concentration.
8. Water heavily after planting so that you are combining watering and leaching. Continue to water heavily until the plants have become well established.

9. Maintain the following nutrient levels:

Nitrate Nitrogen	10-25 p.p.m.
Phosphorus	5-10 p.p.m.
Potassium	20-40 p.p.m.
Calcium	200-250 p.p.m.
Solubridge reading	40 or lower

10. Apply a complete fertilizer at time of bud initiation. Heavy watering and frequent light fertilizing will make chrysanthemums grow.



Black cloth suspended over bench eliminates need of supports on the bench

Cultural Pointers

FERTILIZERS

Soil structure is the key to soil fertility. The response of chrysanthemums to fertilization depends upon a favorable soil structure. It is known that plants require nutrients, water and air for growth. Good soil structure will provide proper air and water relationships. Therefore, it behooves us to give proper attention to the soil before starting the crop. Good open soil is a necessity.

Feeding

Chrysanthemums do much better right from the start if the soil is not too rich. Very often this crop will start off faster in new soil as compared to old soil that has been sterilized just because of the lower nutrient level in new soil. When using new soil, apply 5 pounds of superphosphate per 100 sq. ft. of area, plus a liberal application of manure before planting. Phosphorus moves slowly within the soil mixture. It should always be added before the crop is benched so that it may be mixed thoroughly into the soil. One to two applications of a complete fertilizer, such as Electra, made after the plants become established and until color shows will be adequate. Electra applied at the rate of 2 pounds per 100 sq. ft. of bed is sufficient. Never apply fertilizers to a dry soil. Water lightly first, then apply the proper quantity of fertilizer, and then water heavily. Liquid feeding with water-soluble fertilizers is fast becoming the popular method of applying fertilizer. **Remember that the plant is the best guide to fertilizer requirements and that more mums are ruined by over-feeding than by nutrient deficiencies.**

Levels of Nutrition

When using sterilized soil, the best recommendations to follow would be to analyze your soil from time to time. We have found that when the following nutrient levels are kept, good crops are the result. **Nitrate nitrogen should be 10-25 p.p.m.; phosphorus 5-10 p.p.m.; potassium 20-40 p.p.m. and calcium near 200 p.p.m.** To increase the nitrate level, feed one pound of ammonium sulfate per 100 sq. ft. of area, and to bring up the potassium, apply muriate of potash not to exceed 1 pound per 100 sq. ft. If phosphorus is needed, apply mono-calcium phosphate at the rate of 1 pound per 100 sq. ft.

A liberal application of calcium sulfate (gypsum), 5 pounds per 100 sq. ft., after steam sterilization will prevent injury to young roots. High phosphorus also reduces toxicity after sterilization.

In the cooler weather and shorter days of September, omit the nitrogen if the plants are growing freely. The mum assimilates more phosphorus and potassium during the time of bud initiation. Therefore, it is desirable to apply a complete fertilizer shortly after the buds are visible.

Soluble Salts

Soluble salts are chemical compounds consisting of an acid part (ion) and a basic part (ion). For example,

common table salt, sodium chloride, consists of one ion of chloride and one of sodium. Chloride is an acid-forming ion, and sodium a basic or alkali-forming ion. The two combine in chemically equivalent quantities to form a neutral salt. Other common acidic ions are sulfate, nitrate, bicarbonate and phosphate. Other common basic ions are calcium, magnesium, potassium and ammonium. Any basic ion may combine with any acidic ion giving rise to a great variety of salts.

All plant nutrients which are absorbed by plants from the soil or from culture solutions are absorbed in the form of salts or their constituent ions. All organic materials become "mineralized" through decay processes, and the nutrients in them are converted into salts before being absorbed by plants. Some salts contain plant nutrients and are beneficial in the small quantities required for plant growth. Others contain no nutrients. All salts are harmful beyond the small



Permanent Overhead Watering System

quantity required for plant growth. A little is bad, more is worse, up to the point where plants will be killed. Salts are found in most water and are applied as fertilizer. Improper watering may permit a concentration into the harmful range. Instruments called Wheatstone's bridges are available which measure total soluble salts in terms of electrical conductivity or conductance. Many laboratories of the Agricultural Extension Service are equipped with Solubridge instruments for use in assisting with soluble salt problems.

It has been found that **when planting rooted cuttings, the Solubridge readings should not be higher than 40**, while established plants do not withstand readings of 100 without showing some harmful effects. To remedy excess soluble salts, apply 2 to 3 gallons of water per sq. ft. and leach out this high salt content.

Cultural Pointers

PLANTING

Chrysanthemums grow equally as well on a raised bench or on a ground bed. The care is slightly different in that raised benches dry out more frequently during the summer and early fall months. It must be remembered that a good circulation of air is desirable, yet a direct draft is not advisable.

Planting Date

The proper date of planting will naturally vary according to when the crop is to bloom. For natural blooming we prefer to plant 3 or 4 weeks before the last pinching date. When flowering from August to October, we suggest you plant 3 weeks before the pinching date. In the year-around flowering schedule where no pinch is followed, we have given the advised planting dates in that schedule.

Planting Rooted Cuttings

Many florists are planting rooted cuttings directly into permanent locations. This not only reduces several handlings and production costs, but also produces a better-quality bloom. We fully realize that it is often an impossibility for all to treat their chrysanthemums this way. However, we have found that young, soft plants are superior to hard, woody plants. **Never plant cuttings any deeper than what they were in the propagating media; too deep will cause stem rot.** Water heavily after planting. If new white roots are not formed within the first 12 hours, something is not quite right.

Single-Stem or No-Pinch Method

Cuttings are planted and allowed to grow without pinching. It is an essential practice if 3 crops a year are to be realized in the year-around flowering schedule. Where crops are planted from September 15 to February 1, no-pinch method produces a superior crop, whereas a pinched crop is weaker and of poorer quality.

Light Intensity

When planting rooted cuttings into their permanent position, it is necessary to shade the glass or to put aster cloth directly over the young plants until they are established. When shading the glass, be sure that the material is applied lightly.

When growing quality chrysanthemums, the higher the light intensity or the least amount of shade over the plants during the growing season, the better the quality of bloom. Shade on the glass is only there for the convenience of the grower and not for the requirements of the plant. For cloth houses, the amber Saran

is superior to the green because of more light under the amber covering. Naturally the plants require more water when growing under high light intensities.

It is recommended to shade the plants when flowers are about one-half open to prevent them from sunburning. When growing standards, a good practice would be to stretch muslin directly over the open blooms. This not only prevents sunburning but also keeps the blooms free from dirt.

Distance of Planting

For good quality pompons, we prefer to plant 7x7 inches or 8x8 inches pinched once, and thin the shoots to 3 per plant. The outside rows will support one more stem than the center rows in the bed. Nothing is gained by planting at a closer distance. Light intensity should be high at the base of the plant for quality blooms, and if planted too closely, we have lost the factor which promotes quality. Large-flowered varieties are generally planted 8x8 inches or 7x7 inches; this also applies to disbud anemone and single varieties.

For single stem, no-pinch method pompons should be spaced 4x6 and standards 5x6. When further spacing is used the sprays of the pompons become too large. A slightly closer spacing is recommended when growing conditions are more favorable. Mini-mums (short disbuds) should be spaced 4x6 when two stems are grown on each plant and 6x6 when three stems are allowed to develop.

PLANTING DISTANCE FOR NO-PINCH METHOD

Pompons	4 x 6 inches
Standards	5 x 6 inches
Mini-mums	4 x 6 inches (2 stems)
Mini-mums	6 x 6 inches (3 stems)



Applying Additional Light to an Entire House

Cultural Pointers

PINCHING

For a good number of years, the reason for pinching was to regulate the number of stems on the plant. In recent years, we have learned that in the case of pompons or singles the pinching determines the type of spray formation. With standards, pinching will determine the type of bud formation, whether it be a crown or terminal bud. Always pinch in the soft wood.

Time Pinching

The precision culture of chrysanthemums is all set up around the "Last Pinch." To grow a quality pompon, you should receive the rooted cuttings sometime in June, July or August and then plant into the permanent location approximately 3 weeks before the date listed in our list of varieties under pinch date.

Under the heading "Chrysanthemum Flowering Schedule" you will find the exact pinching dates for all planting dates. The table below will indicate the time to pinch after planting, according to various planting dates:

When planting **Nov. 15 to Feb. 14** allow **4 weeks** plant to pinch.

When planting **Feb. 15 to Nov. 14** allow **3 weeks** plant to pinch.

Time pinching standards will eliminate the formation of the crown bud and produce terminal buds which will in turn produce a much straighter flowering stem.

Pruning

Another important factor is to remove all shoots but 3 or 4 per plant. In a few instances only 2 shoots are

allowed to mature. Allow more shoots to develop on the outside rows than on the center rows of a bed. When fewer breaks are selected, the planting distance should be closer.

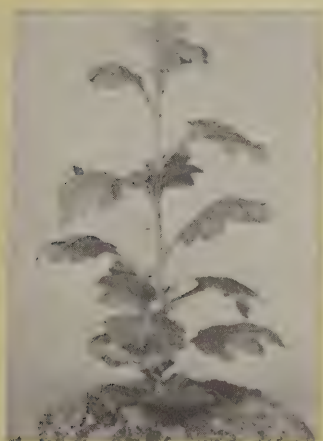
Standards are usually pinched once to induce breaks so that they may be grown 2 per plant. The strongest breaks are selected and all others removed. It is well to pinch on the date suggested in the general list. Careful observation has shown us that neckiness with some varieties is eliminated by pinching on the respective dates. Singles and anemones are usually grown 3 to 4 stems per plant.

Condition of Plant

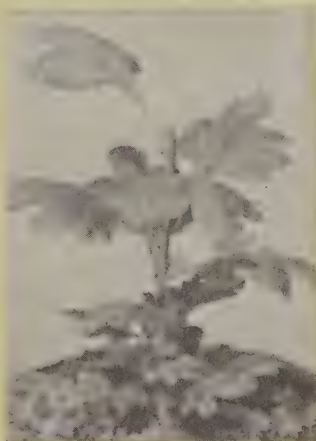
When pinching, remove only the soft growth, never cut into the woody stems as this will not produce the type of breaks you desire. It is our experience that it is best not to pinch until the plant has become well established in its permanent location. In all cases, it is better to have at least 8 to 10 inches of growth on the plants before pinching. (Photos below.)

If by chance you are delayed in planting, and your plants will be too tall, it is advisable to pinch early enough before benching so that the breaks will be several inches long at time of planting. Never pinch hard plants at the same time they are planted in the bench as a heavy loss may result. Better wait until plants are established and then pinch.

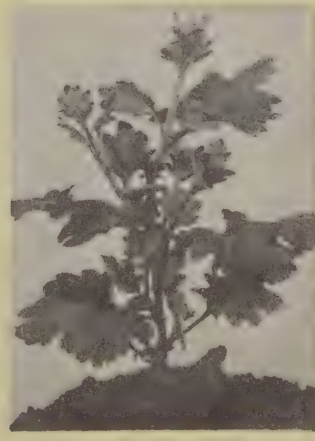
The pinching dates given after each week response will help you grow that variety to excellency. Remember that pinching is just one cultural point and will only function when all other cultural points are carried out properly.



Well-Established Young Plant



Top Several Inches Removed



Strong Breaks Resulting from Single Pinch

Cultural Pointers

DISBUDDING

Large-flowered varieties produce side shoots in the axils of the leaves which should be removed very close to the base at regular weekly intervals. Disbuds are handled the same as standards.

Taking Bud

Taking bud means allowing the flowering bud to remain and removing all others and applies to standards and disbuds. The chrysanthemum usually produces two distinct types of flowering buds — Crown and Terminal. The first bud produced is called the crown bud and is distinguished by being surrounded by other lateral leaf buds. The second is the terminal bud and is surrounded by several flower buds. If the plant is planted especially early, a second crown bud may appear. In appearance, this second crown bud is exactly the same as the first.

The procedure of "Taking Bud" depends very largely on the variety. Usually the safest rule to follow is not to select a bud on early or midseason varieties before August 25. In our list of large-flowered varieties under "Select Bud" you will find the date on which to select the proper bud. If bud is selected too early, a large percentage of the flowers will be crippled. Good common sense must be used to determine the proper selection of bud.

The formation of the crown bud usually does not take place when pinching plants on the date of their response group. When following "Time Pinch," select the first bud that appears. This will result in straight stems without the dogleg growth that appears when second bud is taken.

The final selection of bud should not be made when the cluster buds are too small as this will very likely cause injury to the stem near the bloom. Likewise, it is not advisable to delay selecting the bud too long. Some growers like to leave an alternate bud until they are certain that nothing will happen to the one finally selected.

Disbudded Spray

The procedure in growing disbudded sprays is to wait until the crown bud forms, then remove all but three vegetative shoots. Later, when terminal buds appear, disbud each shoot similarly to the normal disbudding of standards. When the blooms mature, there are three flowers on each spray. In singles and anemones, the size of the blooms will be a trifle smaller than when they are grown as one flower per stem. Raise 3 stems per plant, similar to straight disbud. Varieties such as

Goldsmith, Valencia, etc., can be grown as disbudded sprays.

Good chrysanthemums result from the careful thorough practice of the basic principles of plant growth, plus the acknowledgment of certain differences in the nature of various varieties. Growing disbudded sprays is a modification in culture which is very much worthwhile.

Premature Budding

Bud initiation can occur anytime during the spring months, whenever your temperatures in the greenhouses are consistently 60 degrees Fahrenheit or above, and the days are short enough to initiate bud setting. These conditions can occur anytime up until May 1st depending upon the variety and the locality in which they are being grown. Some varieties, such as the garden varieties and early shading varieties, require very little short-day treatment, coupled with high temperatures to initiate buds. This same tendency to set bud readily is what makes these varieties desirable for early shading and garden work. In order to prevent this premature setting of buds, these same varieties should be placed where they can be given additional light during the early spring months. Use 60-watt bulbs spaced 4 feet apart and 24 inches above the plants. Three hours of light during the middle of the dark period will prevent budding completely if the minimum intensity is 8-foot candles. The same treatment on either end of the night might not be effective if you have a particularly cloudy period which gives you extremely short day.



*Left: Terminal bud surrounded by flower buds.
Right: Terminal bud selected.*

Cultural Pointers

WATERING

The knowledge of proper watering is essential to success. Chrysanthemums produce extremely heavy foliage, and a great deal of water is required at the roots. And under ordinary conditions of bench culture, overwatering would be difficult. When grown in beds, more care should be exercised in watering. Some soils look wet on the surface but are very dry several inches below.

When planting rooted cuttings directly into their permanent locations, it is essential to water thoroughly to set the soil around the plant roots. We suggest double watering again when the soil gets on the dry side. By this time, the plants are established and regular watering should be followed. Keep humidity in the house by wetting down bench and walks.

Steam sterilization causes the soil to become more granular, and capillary movement of water in it is much slower than in soils not steamed. Cuttings planted in it cannot obtain water readily, and for this reason should be kept more moist than in soils not sterilized.

Surface Watering

During the past several years, many labor-saving devices have been developed. Surface watering is one that will save many hours of hand watering your chrysanthemum crop. The Greco Automatic watering system, the Skinner Superior nozzle and the White Showers nozzle are outstanding methods in use today.

When installing surface watering, check your water supply and the capacity needed to irrigate your area. It is advisable to have an engineer figure out your requirements.

Leaching

Many greenhouse soils are excessively rich, and chrysanthemums will not thrive in such a medium. If this is the case, the remedy is leaching with water. After the soil is sterilized, it should be leached. Use a Skinner line and allow it to run for hours if necessary. Raised benches do not require as much water to leach.

TEMPERATURE AND LIGHT

Chrysanthemums grow most rapidly under conditions of high light intensity and with a temperature above 60 degrees Fahrenheit. Shading to reduce the light intensity is very rarely needed. Usually shading on the glass is more beneficial to the workers than it is for the growth of the plants. However, if shade is used it should be removed by August 15.

Temperatures much above 90 degrees will act as a prohibitor. When the night temperatures are in the 90's, bud development is hindered. This is especially true when black-clothing in the hottest part of the year. To reduce high temperatures under the black cloth, it is suggested that the sides of the cloth be lifted after sundown and dropped again before the sun rises in the morning. During high temperature periods, it is much better to apply the cloth later in the afternoon and allow it to remain later in the morning.

Temperature has been responsible for peculiar types of flowers. The Indianapolis varieties develop quilled and flat blooms when allowed to develop under low

temperatures. Many varieties will develop black centers in the flower when grown under high temperatures and low light intensity.

Pink and bronze colors just do not develop when the temperatures are high in the early stages of flower development. If good color is desired in pink and bronze varieties the night temperature should be 50 to 55 degrees during the development period. High light intensity and low temperatures are conducive for good color development. Many of the newer varieties will develop better color during hot summer months than the older varieties. Low moisture during the period of bud development intensifies the color. The pinking of white varieties and the bronzing of yellow varieties results as the flowers develop at low temperatures.

Blindness

Blindness is associated with temperature. When plants are grown below 50 to 55 degrees during the bud initiation period, many varieties will produce blind

Cultural Pointers

Temperature and Light (Cont.)

growth. In "Year-Around Flowering" we have found that chrysanthemums should be grown in a 60-degree temperature to insure good bud development. However, there are some varieties which require a higher temperature, and there are likewise varieties that will initiate their buds at a lower temperature; but it is safe to recommend a 60-degree temperature. Cornell workers found that growing the stock at different temperatures will affect the flowering of some varieties.

Petal Burn

When blooming chrysanthemums during high temperatures and high light intensity, it is advisable to cover the beds with a cheesecloth stretched about 18 inches above the top of the developing blooms. This covering will also help keep dirt off the open blooms. Sunburn sometimes is confused with flower ray blight, which is caused by Botrytis. Botrytis is more abundant during periods of high humidity and low temperatures. Ray blight can be controlled by spraying with **Parzate** when the color shows and then repeating the application every 5 days.

Cloth Houses

Much has been written about the construction and care of the cloth house. It seems that this subject is well taken care of, although there are a few new ideas that should be mentioned.

To grow quality stock, it is necessary to use some type of covering such as aster cloth, onion bag or Saran. Saran plastic shade cloth woven from flat, elliptical yarn is now available to give varying percentages of shade. Cloth can be obtained that will cast 46% to 90% of shade. The cloth that casts 46%

shade is recommended for chrysanthemum culture. Saran will outlive copper screening.

Shipping Flowers

Packing of cut flowers should be carefully studied. The most common error is over-crowding in the shipping boxes. Not securely fastening the blooms in the box will cause bruising of the petals. Cleating or sewing the stems to the box is essential. Cushion the blooms by placing enough padded paper at the bottom of the corrugated box and between the layers of blooms. Wrap the pompons with a loose wrapper. Chrysanthemum "Saf-Pak" are very helpful in shipping standards to market. One dozen blooms are held securely in one "Saf-Pak" holder.

Long distance shipments carry better if the cut flowers are packed dry. Reduction of temperature is accomplished by precooling the packed cut flowers.

Supports

With high labor costs, it has become necessary to eliminate some of the labor in supporting standards and disbuds. The old way of supporting with stakes or stringing each plant has given way to the box-wire and cross-string method of support. Turn-buckles placed near the end of the bed will keep the wires much tighter. Some growers are only using one layer of wire and cross strings and are gradually raising it as the crop grows.

Pompons are usually supported by the string and wire method similar to that described above. Two layers of wires are necessary to give the pompons good support. When growing out-of-doors or in cloth houses, heavier wire is necessary to give proper support, because moisture often collects in the open blooms causing extra weight.

SOUTHERN CULTURE

It is true the material presented in this manual is primarily from experience gathered for the northern part of the United States. Yet many of the pointers are similar for all parts of the country.

We have noted that the early-flowering varieties from October 15 to November 1 flower approximately one week later in the southern states, while those flowering naturally November 15 to December 1 bloom one week earlier than the dates given in this manual. Last Pinch dates will have to be governed accordingly.

When shading, it has been suggested that the black cloth be placed on the beds late in the evening, 7 or 8 p.m. and left on until 8 or 9 a.m. Shading the usual time traps the excessive heat under the cloth and appears to affect foliage and flower buds. Pink and bronze varieties used for shading and early normal production fade to inferior colors.

Wet-mat fan installations in several greenhouses in

the southern states have lowered temperatures as much as 20 to 30 degrees Fahrenheit over that in non air-conditioned greenhouses in the same range. Enough evidence is available to state that when installations of this type are brought into use in chrysanthemum ranges we will begin an era of year around high quality potted and cut chrysanthemums.

If your soil is very open and sandy constant fertilizing is necessary to keep the fertilizer nutrients up to the required amounts. Heavier applications of fertilizer will have to be given if you are growing in Florida.

The young plants should be illuminated until May 1 to prevent premature flower budding.

The length of day is constantly changing. In Ohio the shortest day has 9 hours of light, while the longest day length is 15 hours. In Florida, it varies from 10 for the shortest and 14 for the longest. In Ohio, the day length will change about 15 minutes each week.

Insects and Their Control

Aphids, or Plant Lice

All aphids are true sucking insects that insert their beaks through the surface of the leaf or stem and extract the juices from within.

INJURY. The feeding of aphids causes the plants to become sickly and stunted. The leaves curl inward, and when the flower terminal is infested, the blooms will be deformed. Certain varieties of chrysanthemums are more susceptible to attack than others.

CONTROL. **Nicofume Fumigation** is an easy method of controlling the black aphid but will do very little to control the green or straw-colored aphids. **Lindane** or **Parathion** is much more effective on the very resistant green or straw-colored aphids. **Vapotone** is also effective when used at higher concentrations. **Malathion** good for control of aphid and spider mite.

Chrysanthemum Leaf Miner

The larva or maggot disfigures and weakens chrysanthemum plants by mining in the leaves. It may do considerable harm to the crop, but is easily held in check.

INJURY. The young maggots burrow in the leaf tissue, leaving the upper and lower surfaces intact. The tunnels are irregular and winding. White blotches are thus formed, which later turn brown, and the leaves may die.

CONTROL. As soon as it is noticed that any leaves are infested, they should be picked off. **Parathion** or

TEPP aerosol bombs or sprays, containing **Lindane**, **Chlordane** or **Parathion**, are very effective.

Chrysanthemum Midge

The chrysanthemum midge is one of the most serious pests with which the grower has to deal. Under optimum conditions, a little over a month is required to complete the life cycle from the egg to the adult. The eggs are reddish-orange in color and are usually deposited on the tender tips of the growth. Under favorable conditions, the eggs hatch in about three days. The larva wanders about over the surface of the leaf for a day or two before finally penetrating into the leaf.

INJURY. The midge attacks all parts of the plant but prefers the tender growth. If the infestation takes place when the plants are small, they fail to grow, although if the plants are well-developed when the infestation starts, the buds blight or are deformed, and the plant is rendered unsalable.

CONTROL. **Lindane** is effective against young and adults.

Parathion aerosols effective, but require frequent applications.

DDT effective against adults—repeated applications necessary.



Aphids



Midge Injury

Insects and Their Control

Corn Ear Worm

The corn ear worm is a green to brown, nearly smooth caterpillar often mistaken for a cutworm when found within the buds or on the open flowers.

INJURY. It is very destructive to the opening buds, for it feeds on their petals and other parts, deforming if not entirely ruining the flowers.

CONTROL. If the attacked plants are blooming, spraying is out of the question, but thorough treatment with a 3 or 5% **D.D.T.** dust is recommended. After they have worked their way into the buds and are found to be feeding on the open flowers, hand-picking is the only remedy. Spraying the plants with **Deenate 50W** will control them before the color shows. **Parathion** fumigation will also keep them under control.

Cutworms

The larva is dull colored and from one to more than 2 inches in length. They are most active at night, and usually spend the day coiled up just under the surface of the soil at the base of the plant. They should not be confused with the corn ear worm, which cannot be controlled by poison baits.

INJURY. Cut worms obtain their food by biting out sections of the leaf, stem or bud. Various species attack different parts of the plant. The one that is most damaging climbs to the top of the stem and eats into the flower buds.

CONTROL. Those cutworms that feed on the foliage can best be controlled with **Deenate 50W** spray using 1½ pounds to 100 gallons of water. **Parathion**

has been suggested as a good control measure and is more effective as a spray.

Greenhouse Leaf Tyer

It gets its name from its habit of spinning light webs inclosing 2 or more leaves or tying together the parts of a single leaf. This caterpillar is very active, and when disturbed, will wriggle off the leaf, often backwards, lowering itself on a silk-like strand.

INJURY. When first hatched, the larvae eat out shallow holes on the under side of the leaf. As they grow, they enlarge these holes but usually do not cut through to the upper surface. The result is that the leaves become skeletonized.

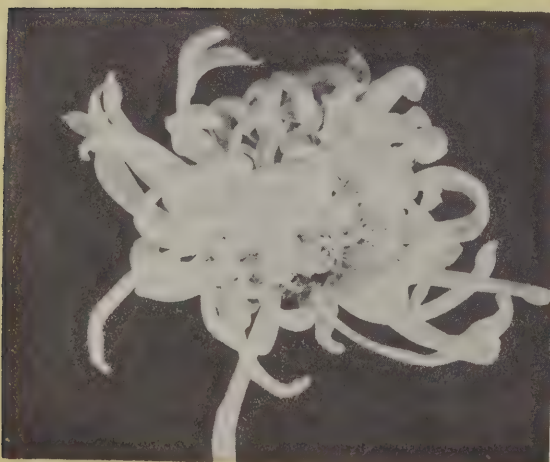
CONTROL. The best poison to control the larvae is **Deenate 50W**, either in the form of a dust or a spray. For liquid spray use 1½ pounds of **Deenate 50W** to 100 gallons of water. Regular fumigations with **Parathion** will keep the leaf tyer under control. The leaf roller is best controlled with **Parathion** or **TDE**. **TDE (Rhothane)** is closely related to DDT and it is used at the rate of 2 pounds of 50% wettable powder to 100 gallons of water.

Mealy Bugs

Mealy bugs are small, sluggish, whitish, soft bodied insects, measuring up to one-quarter inch long, found in clusters on the undersides of the leaves or in the leaf axils.

INJURY. This pest sucks the juices from the stems and leaves, discoloring and deforming the foliage.

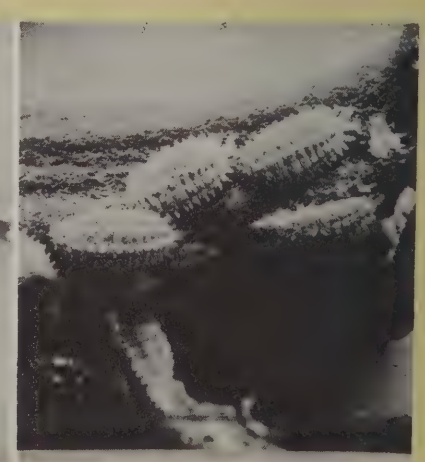
CONTROL. **Parathion** or **Dithio** are the most effective. Repeated applications necessary.



Corn Ear Worm Damage



Leaf Tyer



Mealy Bugs

Insects and Their Control

Mites

Cyclamen mite and broad mite are often found on the same plants at the same time. Broad mite could pass through a complete generation in 4 to 5 days at 70 to 80 degrees, while the cyclamen mite will take 4 to 5 times longer.

INJURY. Infested leaves become deformed, curl from the outside inward, and wrinkle so that pockets and pit-like depressions are formed. When the infestation is severe, the mites collect about the buds, causing them to blight. Oftentimes white varieties will show occasional red petals.

CONTROL. Endrin at 1-400 with DuPont Spreader Sticker 1-2000 gave excellent control. **Systox** used as a soil drench has been found effective in mite control. **P40** used at the rate of 3 pounds per 100 sq. ft. is also effective.

Red Spiders

There are several species of red spiders that attack the chrysanthemum. They vary in color through yellow, orange and red. The body is oval in outline and bears 8 well-developed legs.

INJURY. Red spiders pierce the epidermis of the leaf and draw the liquid contents from the cells, causing the leaf to turn pale around the injured portion. They prefer to collect on the under surfaces of the leaves, which they cover with silken threads.

CONTROL. Parathion or TEPP bombs are most effective and easiest to apply. HEPT or TEPP contained in insecticides such as Vapatone are by far the most effective on red spider. Moisture is detrimental to the development of the red spider, and frequent syringing washes them and their eggs off the plants. **P40** at 3 pounds per 100 sq. ft. after plants are well established; especially desirable for cloth house oper-

ators, will also control foliar nematodes. **Systox** emulsion used as a soil drench has also been found effective in mite and aphid control on outdoor plantings. **Plantfume 103** smoke generators and **Fulex Parathion Fumigators** are simple to use and very effective. **Dithio** is much safer than other insecticides when used on open flowers. **Aramite**, **Chlorobenzilate** or **Malathion** spray or bombs should be tried if **Parathion** or **TEPP** does not give good control.

Symphylids

Symphylids are small white creatures about one-eighth to three-sixteenth inches long. About 40-60 days are necessary for the completion of the life cycle.

INJURY. Symphylids destroy the fine root hairs and small rootlets, thus stunting the plants and often killing them outright.

CONTROL. Complete control can be obtained with **Lindane** applied to the soil. **Lindane** can be applied to the surface of the soil either as a dust or as a wettable powder in a convenient amount of water. Application can be made when plants are in the bed, but best results are obtained if the insecticide is worked into the soil prior to planting. Use **Lindane 25W** at the rate of 8 ounces per 1000 ft. or 1% **Lindane** dust at the rate of 10 pounds per 1000 sq. ft.

Sowbugs

INJURY. Sowbugs often become so plentiful in the greenhouse that they eat the newly-planted cuttings at the base.

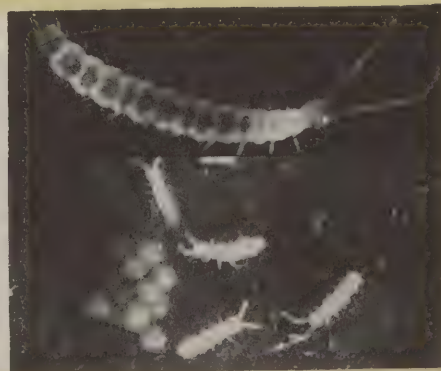
CONTROL. Any of the many poison baits will give partial control, but a complete spraying with **DDT** under the benches has given excellent control. **Deenate 50W** will give complete control.



Mite Injury



Red Spider Injury



Symphylid. Above, adult — below, eggs and young

Insects and Their Control

Tarnished Plant Bugs

The tarnished plant bug or sting fly comes into the greenhouse through open doors and ventilators in late summer or early fall and does considerable harm to this crop. Chrysanthemums growing in the open are frequently affected. Varieties such as Mary L. Hall and Sea Gull are attacked to a greater extent than other varieties.

INJURY. It has sucking mouth parts and obtains its food by inserting its long, slender beak into the plant tissues and sucking up the contents of the injured cells, apparently injecting saliva, which causes the death of the tissue in the immediate vicinity. The stem is often slightly bent, and the terminal growth is malformed because of this injection.

CONTROL. Early morning spraying or dusting with any of the pyrethrum materials will kill those bugs that are present but this will have to be done each day for complete eradication. **Deenate 50W** has been giving fair control, but again this insecticide is best used as a contact. **Parathion** fumigation will control this insect in the greenhouse.

Termites

Termites are not ants, though often called white ants. The food of termites is wood or cellulose. Soil inhabiting forms are the most common in the greenhouse.

INJURY. Termites sometimes injure chrysanthemum plants by working up the center of the plant and

hollowing out the stem. This injury will eventually kill the plant.

CONTROL. Clean up all wood debris in soil. Replace old wooden benches. Keep wooden bench supports from direct contact with the ground.

Thrips

The chrysanthemum is usually attacked by one or more species of thrips. These small, narrow-bodied, active insects which range in color from yellow to brown or almost black, injure both the leaves and the blossoms. Thrips are a real threat to Florida mum growers.

INJURY. Thrips have mouth parts that are fitted for piercing and scraping the leaf surface and for sucking the juices and other cell contents. The upper surface of the foliage is covered with whitish blotches, while minute black specks appear on the lower surface. Unless a constant watch is kept on the plants and control measures are properly executed, thrips are capable of causing severe injury within a short time.

CONTROL. **Deenate 50W** used at the rate of 1 pound to 100 gallons of water is a very effective control. Other insecticides containing **Lindane** are also recommended. **Parathion** will control the chrysanthemum and onion thrips. Regular dustings or spraying are necessary where infestation is heavy. **Chlordane** is also very effective.



Tarnished Plant Bug



Thrip Injury



Adult Onion Thrip

Pests and Their Control

Foliar Nematode

The spread of this pest has been very rapid in recent years owing to the increased trade in chrysanthemums and the ease with which the nematode is transported in plants and cuttings. Too few growers have become familiar with this pest, and consequently no effort has been put forth to control it.

SYMPTOMS. The leaves attacked become blotched, turn at first greenish-yellow, then brownish, later gray and finally black until the entire leaf dies and hangs down on the stem. Under conditions of high hu-

midity both in the open during a wet season and under glass due to excessive watering, the spread of the pest may be extremely rapid.

CONTROL. P40 applied at the rate of 3 pounds per 100 sq. ft. has given good control. Wait 2 to 4 weeks after benching before applying. It is better to apply P40 in 2 applications, 1½ pounds each time, 7 to 10 days apart. The latest findings show that foliar nematodes can be controlled with Parathion either as an aerosol or liquid spray. Systox emulsion applied as soil drench 2-4 weeks after planting is effective.

Diseases and Their Control

Bacterial Stem Rot

SYMPTOMS. Cuttings may appear healthy although infected, grow well up to 8-12 inches high when the stem becomes soft and off-colored. Pith is jelly-like or lacking in such stems. Tops of plants then turn black, exude drops of liquid, and the stem often splits. Develops at high temperatures (75-90 degrees). Often shows up after the plants are pinched.

CONTROL. Remove and burn immediately all affected plants. Wash hands thoroughly after handling plants. Steam infested soil before replanting. Avoid dips for cuttings.

Collar Rot or Stem Rot

SYMPTOMS. The area of stem just at the soil level will show dark colorings first. The entire stem will be girdled, and eventually the plant will turn yellow and die. Usually caused by the common damping-off organisms such as Rhizoctonia, Fusarium or

Pythium. More prevalent when temperature and humidity are high.

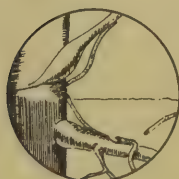
CONTROL. Do not plant cuttings that have been affected with damping-off. Remove all affected plants when noticed. Do not keep the soil too moist. Run a lower humidity if possible. Plant cuttings no deeper than depth they were in propagating media, as too deep planting will hasten development. Have soil well prepared, as compact soils will also encourage trouble.

Mildew

SYMPTOMS. Whitish powdery growth on upper surface of leaves.

CONTROL: Spray at regular weekly intervals with a good wettable Sulfur, 1½ pounds per 100 gallons of water to which a good commercial spreader has been added. Spray with Mildex 4 ounces per 100 gallons of water plus spreader whenever disease appears.

BIOLOGY OF THE FOLIAR NEMATODE



Eelworms moving from the ground up the outside of the stem and leaf-stalks into the basal leaves. (Spring)



Eelworms entering leaf through the stomata. (Spring-Summer)



Eelworms feeding and breeding in leaves and migrating upwards from leaf to leaf (Spring-Autumn)



Eelworms overwintering in soil, dead leaves and in basal buds. (Winter)

Diseases and Their Control

Ray Blight or Flower Spot

SYMPTOMS. The petals first show little spots and then the entire petal begins to rot. May be caused by *Botrytis* or *Ascochyta*. *Botrytis* is spread primarily by splashed water.

CONTROL. It is controlled by lowering humidity or spraying plants with **Parzate** when they show color. Spray with **Parzate** one ounce to 4 gallons of water plus one-third teaspoonful of **Du Pont Spreader Sticker** on the flower from below and above as soon as color shows and continue at 5-day intervals. **Orthocide 50W** one ounce to 4 gallons of water plus spreader used as a spray similar to **Parzate** was found a good control. An electric fan, placed above the plants will circulate the air sufficiently to reduce disease.

Root Knot Nematode

SYMPTOMS: The nematodes or eelworms bore into the roots of the plants and cause knots or galls to develop on the root systems. As a result the plants are weak, yellowish and stunted in growth.

Steam sterilization of the soil is very effective in eliminating the nematodes. **Dowfume G** is a good soil fumigation that will kill nematodes and not do any damage to the surrounding plants.

Rust

SYMPTOMS. Chocolate brown powdery pustules on lower surface of the leaves.



Dodder Growing on Mums

CONTROL. **Parzate**, one ounce to 4 gallons of water is most effective.

Septoria Leaf Spot or Leaf Blight

SYMPTOMS. Distinct circular spot on the leaves. These are greyish-brown in color and become brittle in the center. Affected leaves may turn yellow and die. More prevalent in the open. Some varieties are more susceptible than others. Sea Gull is very susceptible.

CONTROL. When cuttings are received, dunk the tops into **Fermate** (2 tablespoonfuls to a gallon). Spray the plants with **Parzate** one ounce to 4 gallons of water plus one-third teaspoonful of **Du Pont Spreader Sticker** every 10 to 14 days. Cloth house mums should be kept covered until the buds can be seen.

Verticillium Wilt or Seidewitz disease

SYMPTOMS. Margins of leaves turn yellow and eventually wilt or dry up. This begins at base of plant and works up the stem. May affect one side of a stem or plant more than the other. No distinct spots. Varieties vary in resistance to this disease.

CONTROL. Verticillium wilt can be avoided by purchasing our disease-free cuttings produced from **cultured stock**. It is also necessary to plant only into sterilized soil.



Septoria Leaf Spot

Pests and Their Control

Viruses

The word "virus" is being referred to by the medical profession as well as by the florists, and a short explanation of virus should prove of interest.

Viruses of the chrysanthemum are considered to be infectious; that is they can be transmitted to a healthy plant only by contact with an infected plant. They are not carried in the soil, water or air as are other diseases caused by fungi and bacteria.

The virus particles cannot be seen by the most powerful microscopes. Most of them will pass through bacterial filters. They respond like living organisms. They are always present in the sap of diseased plants and can be transmitted to a healthy plant through wounds or by mechanical means. The chrysanthemum is known to be affected with 5 viruses, namely yellows, Aspermy, rosette, mosaic and stunt. Stunt is the only one that has caused much concern. It has been found that aphids as well as mechanical handling will cause stunt to spread.

Once a plant is infected with a virus, it usually always remains affected. To define a virus, the following is as good as any: A virus is a protein which requires the presence of living cells for multiplication and it causes changes in the structure and functions of living cells.

Combination Sprays

At times it is more economical and convenient to mix two or more sprays and apply them in one operation. Before such mixtures are prepared, the grower should be sure no reaction harmful to the plants will occur, and that the efficiency of the separate ingredients is not reduced. Consult your State Entomologist or Plant Pathologist for information on combination sprays for specific crops.

A good combination spray for chrysanthemums which will control most diseases and insect pests, can be made with Parzate, DDT and Vapotone. Details on dilutions are as follows:

Material		Amount to Make	
Water	100 gallons	20 gallons	3 gallons
DuPont Spreader Sticker	6 oz.	2 tablesp.	1 teasp.
Parzate	1 1/2 lbs.	5 ounces	2 tablesp.
Deenate 50W	1 lb.	1/4 lb.	1 1/2 tablesp.
*Vapotone	1/2 pt.	3 1/2 tablesp.	1 1/2 teasp.

To prepare: (1) Measure out spreader and dilute in small amount of water. (2) Fill tank with required water and add the diluted spreader and stir. (3) Take out a small amount in jar, add the proper amount of the Parzate and shake vigorously until all the powder is thoroughly wetted. (4) Pour this mixture back into the tank, preferably through a fine screen or cheesecloth and stir. (5) Measure out Vapotone and dilute in small amount of water and add to the tank. Keep stirring or keep agitator running while adding the materials.

Dodder

SYMPTOMS. Dodder is a parasitic twiner, bearing clusters of small flowers. They are leafless annuals, with very slender yellow, white or red stems, which become attached to the plant by means of root-like suckers. Dodder is occasionally found on chrysanthemums and will cause a complete loss of crop.

*Parathion, 15% wettable powder may be substituted for Vapotone and used at the same rate as Parzate, 1 1/2 pounds per 100 gallons; 5 ounces per 20 gallons and 2 tablespoonsful per 3 gallons.

CONTROL. Dodder is common in low, weedy places and may be carried into the greenhouse in the soil or manure. Soil sterilization is the only prevention. After dodder is attached to the plants, remove the affected plants and burn.



California Cloth House

CHRYSANTHEMUM VARIETY DESCRIPTIONS VARIETIES OF RECENT INTRODUCTION

STANDARDS

8-WEEK VARIETIES

HONEYSWEET

Oct. 15

Semi-incurred disbud. Medium yellow. Suitable for May pots. Showy garden variety as a disbud. Durable at high temperatures. (P)

VALIANT

Oct. 15

Small semi-incurve. Moonlight yellow. Large garden variety. Suitable for May pots. (P)

SUNBURST

Oct. 20

Intermediate reflexed decorative. Golden yellow. Vigorous. Prolific. Pot plant crop for March thru December pots. Short crops May thru December. An outstanding supplement for Bonaffon DeLuxe. (P)

GEORGIA

Oct. 24

Intermediate incurve. Dark yellow. Dwarf. Compact. Improves Blazing Gold in the pot plant program, mid March thru November. Intolerant to low light intensities. (P)

9-WEEK VARIETIES

LUNA

Oct. 25

Small incurve. Cream. Temperature tolerance of Indianapolis. Compact. Uniform. Restrict to pot plant program, January thru December. (P)

MARBLEHEAD

Oct. 25

Small incurve. Clear white. Temperature tolerance of Silver Sheen. Durable. Responsive. Best early white for short crop program May thru November. (P)

10-WEEK VARIETIES

SUSAN LEIGHTON

Nov. 6

Large spider. Ivory white. Standard and pot plant program. Suitable for pots July thru November. Intolerant of low light intensities. Finish cool. Supplements Queen's Lace with a much showier flower. (S-1)

INDIANAPOLIS APRICOT

Nov. 5

Intermediate incurve. Warm apricot bronze. A more versatile color than its parent Ind. Bronze. Size slightly smaller, habit stronger. Standard and short crops mid September thru mid May. Suitable for pots same period. (S-1)

11-WEEK VARIETIES

CALVERT'S GOLD

Nov. 20

Intermediate semi-incurve. Amber bronze. Form and non-fading color improve Apricot Queen. Standard and short crops mid October thru April. Suitable for pot plants in same period. (P)

CALVERT'S PINK

Nov. 17

Intermediate incurve. Orchid pink suffused with salmon. Standard and short crops November thru January. Suitable for pots in same period. Maximum 55° requirement for bud development. Rich color unsurpassed for Thanksgiving season. (P)

12-WEEK VARIETIES

YELLOW GLORY

Dec. 1

Intermediate incurve. Lemon yellow. Color mutation from December Glory. Standard and short programs mid November thru January. (S-1)

BRONZE PETER JOHN

Nov. 25

PINK PETER JOHN

Nov. 25

DK. PINK PETER JOHN

Nov. 25

WHITE PETER JOHN

Nov. 25

YELLOW PETER JOHN

Nov. 25

Large decorative. Standard and short crop programs November thru January. Intolerant of low temperature. 60° minimum for bud initiation; 55° for bud development. Sport from Peter John. (S-1)

Continued

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE LIST ON PAGE 93 FOR QUANTITY PRICES.

POMPONS, DECORATIVES, SINGLES AND ANEMONES

7-WEEK VARIETIES

GARDENIA

Oct. 8

Intermediate decorative. Ivory. Compact. Responsive. Vigor improves Ostosa. Suitable for March thru mid October pot plant programs. Prolific and showy garden variety. (P)

ORANGEADE

Oct. 10

Intermediate daisy. Orange bronze. Vivid color. Compact. Prolific garden variety. (P)

NORTHERN QUEEN

Oct. 12

Intermediate decorative. Pink. Larger flower, more vigor than Petrisian Rose. A superb garden variety of semi-dwarf habit. Very hardy. (P)

CUPID

Oct. 15

Small decorative. Pink. Unique dahlia form. Prolific. Dwarf, masses and spreads as a garden variety. Disbud for May thru early June and late September thru October pot plants. (P)

8-WEEK VARIETIES

PILGRIM

Oct. 15

Intermediate pompon. Clear white. Temperature tolerance of Chris Columbus. Improving that variety in all respects. Short procedure for April thru June and September thru mid October pot plant programs. Durable, compact garden variety. (P)

BLIZZARD

Oct. 15

Small formal pompon. Clear white. Temperature tolerance of Norona. Durable. Productive. Spray programs May thru September. Cloth house July and August. Color and form greatly improve Norona. (P)

RADIANCE

Oct. 15

Intermediate decorative. Red. Breaks freely. Responds uni-

formly. Non-fading color. Medium procedure for April thru May and mid September, early October pots. Color brighter, habit more prolific than Red Velvet. Valuable garden variety. (P)

RED ETHRElda

Oct. 15

Intermediate anemone. Coral red. Dwarf. Compact. Responsive. Spreads well. Best color retention with low temperature finish. Short treatment for pot plants mid September thru mid June. (S-1)

ETHRElda

Oct. 15

Intermediate anemone. Orchid pink. Dwarf. Breaks freely. Responds well. High temperature color retention. Dependable pot plant with short treatment the year around. (S-1)

9-WEEK VARIETIES

MONTY

Oct. 25

Large clear white decorative. Breaks freely, spreads well. Supplements and strengthens the white pot plant program from March thru December. More durable than Wilson's White. (P)

WHITE KEEPSAKE

Oct. 25

Intermediate Ivory pompon. Selection from Keepsake. Like White Popcorn, it is devoid of pink tinges at low temperatures. Spray programs April thru October. Cloth house July thru mid October. At high temperature finish, more ivory than Keepsake. (P)

ALASKA

Nov. 1

Intermediate white anemone with white cushion. Temperature tolerance of Shasta. Productive and responsive. Versatile. Spray program mid April thru mid November. Cloth house

July thru mid October. Short crop disbuds April thru November. Suitable for pots in the same period. A greater degree of cushion development than Shasta in summer temperatures. (P)

SYBIL

Oct. 30

Intermediate daisy. Golden apricot. Productive. Durable. Has petallage and substance. Versatile and brilliant color. Spray programs May thru October. Cloth house August thru Mid October. (P)

REVEILLE

Oct. 25

Small pompon. Pink. Extreme low temperature tolerance. Popcorn production. Requires low temperature finish. For pots during April thru mid June and late September thru October. Spray programs same period. Cloth house September thru mid October. (P)

10-WEEK VARIETIES

ICEBERG

Nov. 5

Large pompon. Chalk white. Tall, vigorous growth. Color clarity of Whitetop and Belray. Best as a year-round disbud. When not disbudded, suggest adding one additional long day week for best spray formation. Period of flowering as a spray mid April thru mid November. Temperature tolerance of Whitetop. Tolerates summer temperatures well. Best 10-week white disbud. (P)

YELLOW BEAUREGARD

Nov. 5

Intermediate pompon. Clear golden yellow at all temperatures.

Selection from Orange Beauregard and identical in habit. Urgently needed 10 week yellow. Temperature tolerance of parent variety. Especially valuable in summer greenhouse and cloth house programs. (P)

JEALOUSY

Nov. 10

Small pompon. Intense yellow, bright green eye. Hard, ball type. Durable. Prolific. Dependable. Spray programs mid March thru mid November. Cloth house August thru mid October. Valuable supplement to Gold Coast. Shapes up well as a pot plant using tall treatment. (P)

POMPONS, DECORATIVES, SINGLES AND ANEMONES

10-WEEK VARIETIES—(Continued)

LUXURY**Nov. 8**

Large decorative. Clear yellow when restricted to high temperature flowering. Superb short disbud June thru October. Vigorous, responsive. Disbudded spray programs May thru October. Cloth house August thru mid September. (P)

YELLOW IGLOO**Nov. 10**

Small pompon. Deep lemon yellow. Selection from Illini Igloo with same habit and temperature tolerance. Spray programs April thru mid November. Cloth house late July thru mid October. (P)

CLIMAX**Nov. 10**

Intermediate pompon. Intense orange. Temperature tolerance of Thelma. Improved vigor and production. Vivid color stimulates demand for bronze. Spray crops April thru mid November. Cloth house August thru mid October. Sets a new color standard. (P)

AMBERHUE**Nov. 10**

Intermediate daisy. Orange-bronze. Improves Buccaneer in growth, form, production and color retention. Green eye. Durable. Spray programs May thru mid June and mid September thru October. Cloth house September thru mid October. (P)

DELIGHT**Nov. 5**

Intermediate daisy. Pink. Tolerant to high temperature flowering. Productive. Durable. Striking color. Fresh appearance. Spray crops April thru mid November. Cloth house mid August thru mid October. (P)

BONNIE**Nov. 10**

Intermediate pompon. Pink. Temperature tolerance of Illini Igloo. Improves Pinkette form and color. Formal and hard. Pink Igloo. High temperature color retention. Spray crops late April thru mid November. Cloth house mid August thru mid October. (P)

DK. PK. PANDORA**Nov. 10**

Intermediate decorative. Dark pink. Selection from Pandora. Spray and short disbud programs mid May thru June and September thru mid November. Cloth house September thru mid October. (S-1)

SALMON PANDORA**Nov. 10**

Intermediate decorative. Salmon. Selection from Bronze Pandora. Unparalleled color for fall cloth house and greenhouse. (P)

SCINTILLATION**Nov. 10**

Intermediate pompon. Pink. Very vigorous. Superb cloth house variety mid August thru mid October. Greenhouse mid September thru mid November. Requires 60° bud initiation. (P)

ANTHEM**Nov. 12**

Intermediate anemone. Pink. Production and durability exceed Memorial. Spray programs April thru mid June and mid September thru mid November. Cloth house August thru mid October. (P)

CELEBRATION**Nov. 12**

Intermediate pompon. Salmon pink. Requires low temperature (max. 55°) finish for uniformity and color retention. Clean, productive habit. New, versatile color. Spray programs April thru June, mid September thru mid November. Cloth house September thru mid October. (P)

11-WEEK VARIETIES

GOLDBALL**Nov. 15**

Intermediate pompon. Golden yellow. Temperature tolerance improves Golden Chord and Forty Niner. Hard, durable. Size of Corsair. Outstanding in cloth house mid August thru mid October. Spray programs March thru May and September thru mid November. Valuable supplement to Forty Niner. (P)

ILLINI GOLDILOCKS**Nov. 15**

Intermediate decorative. Golden yellow. Tall, vigorous. Requires high light intensity for maximum production. Unsurpassed as a decorative in September, October cloth house. Spray program in October. Short disbud programs for October thru December. Requires 60°F or less to develop its flower buds. (P)

CHEERIO**Nov. 15**

Intermediate anemone. Intense golden yellow. Productive. Form has class and quality. Blind tendencies in winter. Spray programs October thru November. (P)

SULTAN**Nov. 22**

Large formal decorative. Golden yellow to amber at low temperatures. Large Orange Beauregard. Vigorous. Productive.

Temperature tolerance of Forty Niner. Constant performance at high temperatures. Disbudded spray and short disbud programs March thru November. Cloth house August thru mid October. (P)

ILLINI WARPAINT**Nov. 22**

Large decorative. Smooth maroon red. Heavy, vigorous growth. Restrict to low temperature finish. Versatile as short disbud October thru December; as disbudded spray and pot plant. Cloth house mid September to mid October. Valuable for Christmas pot plants. (P)

DELMAR**Nov. 15**

Intermediate pompon. Almaga pink. Vigorous. Productive. Distinctive dot color contrast. Improved Almaga habit. Spray crops and short disbuds March thru April; mid September thru November. Cloth house mid September thru mid October. (P)

OLNURA**Nov. 22**

Large anemone. Apricot bronze. Valencia disbud. Superb color and form. Sharp response. Tall. Vigorous. Productive. Disbudded spray and short disbud programs March thru April and mid September thru November. An outstanding DePetris achievement of superlative vigor and beauty. (P)

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE LIST ON PAGE 93 FOR QUANTITY PRICES.

POMPONS, DECORATIVES, SINGLES AND ANEMONES

12-WEEK VARIETIES

ILLINI GLACIER

Dec. 1

Large anemone. Clear white with white cushion. Durable. Productive. Uniform response. Spray and short disbud crops. October thru December and March thru April. Improves Long Island Beauty in color, form and keeping quality. (P)

ILLINI ROSE GLOW

Nov. 25

Intermediate pompon. Pink. Requires low temperature (max. 55°) finish. Productive. Best dissprayed. Mid October thru November. Responsive in March. (P)

13-WEEK VARIETIES

DOLOMITE

Dec. 13

Intermediate pompon. Clear white. Smaller, later version of Carrara. Taller, more vigorous. Spray programs mid November thru December. Adds quality and color clarity to the December season. (P)

GOLDEN ACCLAIM

Dec. 5

Intermediate pompon. Golden yellow. Selection from Acclaim. Intensification of Yellow Acclaim. Spray programs mid November thru mid March. (P)

14-WEEK VARIETIES

WHITE RIVIERA

Dec. 15

Intermediate decorative. Ivory. Equal in size, form, and vigor to parent variety Riviera. Spray programs December thru February. Does not show pink tinges with low temperature finish. (S-1)

ALVODA

Dec. 25

Large decorative. Smooth Portrait pink. One of the best for spray programs late November thru February. Free growth. Habit, size, and color improve Defiance, Debutante and Riviera. This variety contributes to the 14-week group what Almaga did to the 11-week group in the year round flowering programs. (P)

PINK SUPREME

Dec. 10

Large anemone. Pink. Habit resembles Imp. White Supreme. (S-1)

SOPHILIA

Dec. 25

Latest small pink pompon. Similar to Snowcrest in size and habit. Natural season flowering. (P)

15-WEEK VARIETIES

ILLINI CASCADE

Jan. 5

Large decorative clear white. Improves the color, size, vigor, and response of Ill. Snowbound. Tall, responsive. Finishes well at high (60°) or low (50°) temperature. Spray programs late December thru February. A valuable addition to the northern winter program. (P)

GOLDEN SNOWBOUND

Jan. 5

Intermediate decorative. Golden yellow. Color intensification of Ill. Yellow Snowbound. Natural flowering. Low temperature finish. (P)

PRICES PER 100

Price Class	50	100-250	300-450	500-950	1000 Up
S-5	5.50	5.25	5.00	4.75	4.50
S-4	6.00	5.75	5.50	5.25	5.00
S-3	6.50	6.25	6.00	5.75	5.50
S-2	7.00	6.75	6.50	6.25	6.00
S-1	7.50	7.25	7.00	6.75	6.50
P	8.00	7.75	7.50	7.25	7.00

COLLECTIONS

When varieties are not specified, orders may be placed for any general grouping of varieties. These orders must be for full 300 box units. Selection of varieties depends entirely on availability at time of shipment.

1 Box (300 R.C.).....	\$15.00
2 Boxes (600 R.C.).....	28.50
3 Boxes (900 R.C.).....	42.75
4 or more Boxes (1200 or more R.C.).....	13.50 per box

WHITE POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
6-WEEK VARIETIES				
Ostosa (G).....	July 2	Sept. 25	Int. Pompon	S-1
White Wonder.....		Oct. 1	Int. Pompon	S-1
Chris. Columbus (G).....		Oct. 1	Int. Decorative	S-3
7-WEEK VARIETIES				
Limelight.....	July 2	Oct. 5	Int. Pompon	S-1
Avalanche (G).....		Oct. 5	Snow White Decorative	S-1
White Cloud (G).....		Oct. 5	Large Decorative	S-1
Horizon.....		Oct. 5	Pure White; Int. Pompon	S-2
Marshmallow (G).....		Oct. 5	Int. Single	S-1
Gardenia (G).....		Oct. 8	Int. Decorative	P
Maestro (G).....		Oct. 10	Int. Pompon	S-1
Classic.....		Oct. 10	Small Semi-Formal Pompon	S-1
Silverplate.....		Oct. 12	Int. Decorative	S-2
8-WEEK VARIETIES				
Pilgrim.....	July 9	Oct. 15	Int. Pompon	P
Blizzard.....		Oct. 15	Small Pompon	P
Calif. White Daisy (Kimoto's White)		Oct. 15	Int. Single	S-1
Irene.....		Oct. 15	Small Pompon	P
Norona.....		Oct. 15	Small Pompon	S-1
Cream Puff.....		Oct. 20	Int. Single	S-2
Pristine.....		Oct. 20	Pure White; Int. Pompon	S-4
Minong.....		Oct. 20	Small Pompon	P
Silverfone.....		Oct. 24	Int. Single	S-2
9-WEEK VARIETIES				
Popcorn.....	July 16	Oct. 25	Int. Pompon	S-2
White Popcorn.....		Oct. 25	Cream White Sport of Popcorn	S-2
*Monty.....		Oct. 25	Large Decorative	P
Keepsake.....		Oct. 25	Cream White; Int. Pompon	S-4
White Keepsake.....		Oct. 25	Cream White Sport of Keepsake	P
Pinocchio.....		Oct. 25	Small Pompon	S-2
Songster.....		Oct. 25	Int. Pompon	S-2
Cottontop.....		Oct. 25	Small Pompon	P
Shooting Star.....		Oct. 25	Int. Single	P
Vesta.....		Oct. 25	Small Pompon	S-2
Arcadia.....		Oct. 28	Int. Pompon	S-1
Silver Cloud.....		Nov. 1	Int. Single	S-2
Halo.....		Nov. 1	Ivory White; Int. Single	S-2
Cream Halo.....		Nov. 1	Cream; Int. Single	S-1
Sea Gull.....		Nov. 1	Ivory White; Int. Pompon	S-2
*White Doty.....		Nov. 1	Large Pompon	S-2
*Alaska.....		Nov. 1	White Anemone	P
10-WEEK VARIETIES				
Freedom.....	July 23	Nov. 5	Int. Single	S-2
Whitetop.....		Nov. 5	Int. Decorative	S-4
*Iceberg.....		Nov. 5	Large Pompon	P
Madonna.....		Nov. 5	Int. Pompon	S-3
Kolowa.....		Nov. 5	Int. Single	P
Encore.....		Nov. 5	Pure White; Int. Pompon	S-4
*White Anemone.....		Nov. 5	Large Anemone	S-2
White Mensa.....		Nov. 5	Large Single	S-2

* Responds to Disbudding.

(G) Recommended for Garden Culture.

WHITE POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification	
10-WEEK VARIETIES—Cont'd					
Rev. Bushnell.....	July 23	Nov. 8	Int. Formal Pompon	S-1	
Moonglow.....		Nov. 8	Int. Pompon	S-1	
Pacesetter.....		Nov. 10	Int. Single	S-3	
Illini Igloo.....		Nov. 10	Int. Pompon	S-3	
*Shasta.....		Nov. 10	Int. Anemone	S-5	
*Cream Shasta.....		Nov. 10	Int. Anemone	S-2	
Dynamo.....		Nov. 10	Int. Pompon	S-1	
Vesper.....		Nov. 10	Int. Pompon	S-1	
Nagona.....		Nov. 10	Int. Single	S-1	
(Calif. White Mensa)					
*Little America.....		Nov. 10	Pure White; Int. Anemone	S-3	
Illini Snowdrift.....		Nov. 12	Novelty — Int. Decorative	S-3	
Matchless.....		Nov. 12	Int. Pompon	P	
White Memorial.....		Nov. 12	Int. Anemone	S-1	
11-WEEK VARIETIES					
White Taffeta.....	July 30	Nov. 15	White Sport Taffeta	S-1	
Sculpture.....		Nov. 15	Ivory White — L. Single	S-2	
*White Norma.....		Nov. 15	Sport of Norma	S-2	
Eskimo.....		Nov. 15	Int. Single	P	
Snowflurry.....		Nov. 15	Small Pompon	S-2	
Illini Starflower.....		Nov. 18	Semi-Anemone	P	
Seafoam.....		Nov. 20	Int. Pompon	S-2	
*L. I. Beauty.....		Nov. 20	Yellow Cushion; L. Anemone	S-2	
Highbrow.....		Nov. 20	Ivory White; Int. Dec.	S-3	
Nevada.....		Nov. 20	Green Cushion; Int. Anemone	S-2	
*Priscilla.....		Nov. 20	Int. Pompon	S-2	
Illini Bountiful.....		Nov. 23	Int. Decorative	S-1	
Crystal Beauty.....		Nov. 23	Int. Pompon	S-1	
Paramount.....		Nov. 23	Int. Pompon	S-3	
*Belray.....		Nov. 24	Large Pompon	S-4	
Carrara.....		Nov. 24	Int. Decorative	S-2	
12-WEEK VARIETIES					
Silvercrest.....	Aug. 6	Nov. 25	Small Formal Pompon	S-1	
*White Lady.....		Nov. 25	Sport of Beautiful Lady	S-2	
Illini Peace.....		Nov. 25	Large Anemone	P	
*White Valencia.....		Nov. 28	Sport of Valencia	S-3	
Cordova.....		Nov. 30	Cream White; Int. Dec.	S-2	
Fortune.....		Dec. 1	Int. Formal Pompon	S-3	
*Illini Glacier.....		Dec. 1	Large Anemone	P	
Monarch.....		Dec. 1	Ivory White; L. Decorative	S-1	
13-WEEK VARIETIES					
Cameo.....	Aug. 13	Dec. 5	Ivory White; Int. Dec.	S-2	
Acclaim.....		Dec. 5	Large Formal Pompon	S-4	
*Swan.....		Dec. 5	Large Anemone	S-1	
Spangles.....		Dec. 5	Int. Pompon	S-2	
Cotillion.....		Dec. 5	Int. Semi-Formal Pompon	S-2	
Orway.....		Dec. 8	Large Single	P	

* Responds to Disbudding.

(G) Recommended for Garden Culture.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

WHITE POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
13-WEEK VARIETIES—Cont'd				
Snowdrop	Aug. 13	Dec. 8	Small Pompon	S-2
White Snowdrop		Dec. 8	Small Pompon	P
Illini Starlet		Dec. 10	Int. Anemone	S-1
*Imp. White Supreme		Dec. 10	Large Anemone	S-2
Snow Queen		Dec. 10	Int. Formal Pompon	S-2
Snowflake		Dec. 10	Int. Pompon	P
Yukon		Dec. 10	Int. Single	S-2
Satellite		Dec. 13	Int. Pompon	S-2
Dolomite		Dec. 13	Int. Pompon	P

14-WEEK VARIETIES				
Trenton	Aug. 20	Dec. 15	Int. Pompon	S-1
Snowcrest		Dec. 15	Green Eye; Small Pompon	S-3
Cream Snowcrest		Dec. 15	Small Pompon	S-1
Silversmith		Dec. 15	Int. Decorative	S-4
Snowcap		Dec. 15	Large Formal Pompon	S-3
Garza		Dec. 15	Int. Anemone	S-3
White Riviera		Dec. 15	Int. Decorative	P
Heirloom		Dec. 20	Int. Decorative	S-2
Wedding Bells		Dec. 20	Int. Pompon	P

15-WEEK VARIETIES				
Revelation	Aug. 27	Dec. 25	Int. Decorative	S-4
Snow		Dec. 25	Int. Pompon	S-3
Talmeda		Jan. 5	Int. Pompon	S-2
Illini Cascade		Jan. 5	Large Decorative	P
Illini Snowbound		Jan. 5	Int. Decorative	S-2

YELLOW POMPONS, DECORATIVES, SINGLES AND ANEMONES

6-WEEK VARIETIES				
Ming (G)	July 2	Oct. 1	Int. Pompon	P
Yel. Chris. Columbus (G)		Oct. 1	Sport of Chris. Columbus	S-3
Moonlight (G)		Oct. 1	Int. Decorative	S-1
Honeycomb (G)		Oct. 1	Small Pompon	S-1

7-WEEK VARIETIES				
Polaris	July 2	Oct. 5	Int. Single	P
Chas. Nye		Oct. 5	Int. Decorative	S-1
Yellow Spoon (G)		Oct. 5	Int. Spoon	S-1
Dwight Douglas		Oct. 5	Large Decorative	P
Sunstone		Oct. 8	Spoon	S-1
Lee Powell		Oct. 10	Large Decorative	S-1
Goldrush		Oct. 10	Small Single	S-1
Treasure		Oct. 10	Small Pompon	S-1
Bright Forecast		Oct. 10	Small Formal Pompon	S-2
Lemonade		Oct. 12	Ivory Yellow Int. Dec.	S-1
Sweepstake		Oct. 12	Small Pompon	S-1

8-WEEK VARIETIES				
Arlora	July 9	Oct. 15	Large Pompon	S-1
Sundew		Oct. 15	Large Decorative	P
Moondrift		Oct. 20	Int. Ivory Yel. Single	S-1

9-WEEK VARIETIES				
Goldfinch	July 16	Oct. 25	Small Pompon	S-1
Ordalia		Oct. 25	Large Decorative	S-1
Starlight		Oct. 25	Large Single	S-2

* Responds to Disbudding.

(G) Recommended for Garden Culture.

YELLOW POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
9-WEEK VARIETIES—Cont'd				
*Golden Herald.....		Oct. 25	Golden Yellow; L. Dec.	S-3
Gold Coast.....		Oct. 25	Int. Pompon	S-4
Yellow Dot.....		Oct. 25	Int. Pompon	S-2
Cream Dot.....		Oct. 25	Int. Pompon	S-1
Imamura Yellow.....		Oct. 25	Int. Single	P
Aztec.....		Oct. 28	Int. Single	S-3
Sunup.....		Oct. 28	Small Pompon	S-3
Yellow Arcadia.....		Oct. 28	Sport of Arcadia	S-2
Sauterne.....		Oct. 30	Int. Single	S-2
Gondola.....		Oct. 30	Int. Single	S-1
Mary L. Hall.....	July 16	Nov. 1	Deep Yellow; Int. Pompon	S-4
Yellow Halo.....		Nov. 1	Sport of Halo	S-2
Schn. Yel. Daisy.....		Nov. 1	Int. Single	S-2
*Yellow Doty.....		Nov. 1	Buff Yellow; Large Pompon	S-1
Starbright.....		Nov. 1	Deep Yellow; L. Single	S-2
Yellow Daisy.....		Nov. 1	Int. Single	S-1
Yellow Sea Gull.....		Nov. 1	Light Yel. Sport of Sea Gull	S-1
Yellow Cassandra.....		Nov. 1	Sport of Cassandra	P
Sunray.....		Nov. 3	Int. Single; S. Anemone Center	S-3
Honeymoon.....		Nov. 4	Large Single	S-2
10-WEEK VARIETIES				
Barcarole.....		Nov. 5	Int. Pompon	S-3
Brigadoon.....		Nov. 5	Int. Single	S-1
Crescendo.....		Nov. 5	Large Pompon	S-3
Constellation.....		Nov. 5	Int. Decorative	S-3
Pixie.....		Nov. 5	Small Pompon	S-1
Nuggets.....		Nov. 5	Small Pompon	S-1
Yellow Beauregard.....	July 23	Nov. 5	Golden Yel. Sport of Beauregard	P
Golden Mensa.....		Nov. 5	Sport of White Mensa	S-1
Luxury.....		Nov. 8	Large Decorative	P
*Yellow Shasta.....		Nov. 10	Sport of Shasta	S-4
Yellow Nagona.....		Nov. 10	Int. Single	S-1
(Calif. Yellow Mensa)				
Jealousy.....		Nov. 10	Int. Pompon	P
Yellow Igloo.....		Nov. 10	Int. Pompon	P
11-WEEK VARIETIES				
Yellow Sculpture.....		Nov. 15	Large Single	S-1
Princeton.....		Nov. 15	Int. Decorative	S-1
Thorobred.....		Nov. 15	Large Single	S-1
Golden Chord.....		Nov. 15	Golden Yellow; Int. Pompon	S-3
Forty-Niner.....		Nov. 15	Int. Formal Pompon	S-4
Gold Ball.....		Nov. 15	Golden Yel.; Int. Pompon	P
Yellow Fellow.....		Nov. 15	Int. Decorative	S-1
Illini Goldilocks.....		Nov. 15	Golden Yel.; Int. Decorative	P
*Susanne Miller.....		Nov. 15	Large Anemone	S-2
Cheerio.....		Nov. 15	Golden Yel.; Int. Anemone	P
Tacoma.....		Nov. 15	Large Pompon	P
*Yellow L. I. Beauty.....	July 30	Nov. 20	Sport of L. I. Beauty	S-2
Yellow Highbrow.....		Nov. 20	Sport of Highbrow	S-2
Lollipop.....		Nov. 20	Int. Pompon	S-4
Pippin.....		Nov. 20	Int. Pompon	S-3
Klondike.....		Nov. 20	Orange Yel.; Int. Pompon	S-2
Bojangles.....		Nov. 20	Int. Single	S-1
Yellow Nevada.....		Nov. 20	Sport of Nevada	S-1
Illini Sunspot.....		Nov. 20	Large Pompon	S-1
Mingo Chief.....		Nov. 20	Int. Anemone	P
Sultan.....		Nov. 22	Golden Yel.; L. Formal Dec.	P
Yellow Paramount.....		Nov. 23	Sport of Paramount	S-2

* Responds to Disbudding.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

YELLOW POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
12-WEEK VARIETIES				
Goldenrod.....		Nov. 25	Int. Pompon	S-2
Illini Gold.....		Nov. 25	Deep Golden Yel. Int. Pompon	S-1
*Goldsmith.....		Nov. 25	Large Decorative	S-3
Highlander.....		Nov. 25	Int. Formal Decorative	S-3
Sunnyside.....		Nov. 25	Int. Pompon	S-3
Champagne.....		Nov. 25	Int. Single	S-1
Illini Wampum.....	Aug. 6	Nov. 25	Int. Anemone	S-1
*Yellow Valencia.....		Nov. 28	Sport of Valencia	S-2
Yellow Cordova.....		Nov. 30	Sport of Cordova	S-1
Yellow Fortune.....		Dec. 1	Deep Yellow Sport of Fortune	S-1
Omega.....		Dec. 1	Int. Pompon	S-3
Gold Medal.....		Dec. 1	Small Pompon	P
Yellow Galaxy.....		Dec. 1	Sport of Galaxy	S-2

13-WEEK VARIETIES				
Golden Harvest.....		Dec. 5	Deep Gold; Small Pompon	S-1
Brandywine.....		Dec. 5	Orange Yellow; Int. Dec.	S-1
Jack-Pot.....		Dec. 5	Golden Yellow; L. Dec.	S-2
Yellow Acclaim.....		Dec. 5	Int. Pompon	S-2
Golden Acclaim.....		Dec. 5	Golden Yellow Sport of Acclaim	P
Yellow Cameo.....		Dec. 5	Sport of Cameo	S-2
Yellow Spangles.....	Aug. 13	Dec. 5	Sport of Spangles	S-1
Cinderella.....		Dec. 5	Int. Single	S-2
Goldtone.....		Dec. 5	Int. Single	S-1
*Imp. Yel. Supreme.....		Dec. 10	Large Anemone	S-2
Yellow Satellite.....		Dec. 10	Int. Pompon	P
Goldie.....		Dec. 10	Small Pompon	P
Challenge.....		Dec. 10	Int. Single	S-1
Corsair.....		Dec. 10	Large Semi-Formal Pompon	S-4

14 WEEK VARIETIES				
Yellow Riviera.....		Dec. 15	Golden Yel.; Sport of Riviera	S-1
Yellow Snowcrest.....		Dec. 15	Sport of Snowcrest	S-2
Yellow Garza.....		Dec. 15	Sport of Garza	S-2
Sequin.....		Dec. 15	Small Pompon	S-1
Shamrock.....		Dec. 15	Large Decorative	S-3
December Gold.....	Aug. 20	Dec. 15	Golden Yel.; Int. Decorative	S-2
Sunkist.....		Dec. 20	Int. Single	S-1
*Vibrant.....		Dec. 20	Int. Decorative	S-3
Revelry.....		Dec. 20	Int. Decorative	S-1
Gold Seal.....		Dec. 20	Int. Single	S-1
Sunrise.....		Dec. 20	Int. Pompon	S-2
Golden Anniversary.....		Dec. 25	Small Pompon	S-2

15-WEEK VARIETIES				
Siren.....		Dec. 25	Int. Decorative	S-3
Yuleflame.....		Dec. 25	Large Decorative	S-2
Yellow Snow.....	Aug. 27	Dec. 25	Sport of Snow	S-3
Golden Snowbound.....		Jan. 5	Sport of Ill. Snowbound	P
Ill. Yel. Snowbound.....		Jan. 5	Sport of Ill. Snowbound	S-2

(G) Recommended for Garden Culture.

BRONZE AND RED POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
6-WEEK VARIETIES				
Orloma (G).....	July 2	Sept. 25	Red Int. Decorative	P
Orsona (G).....		Sept. 25	Bronze Int. Decorative	P
Mme. Cadillac (G).....		Oct. 1	Red Pompon	P
W. P. Snyder (G).....		Oct. 1	Coral Bronze; Int. Decorative	S-1
Mogul.....		Oct. 1	Raspberry Bronze; Small Dec.	P
Bonfire.....		Oct. 1	Red Pompon	S-1
7-WEEK VARIETIES				
Remembrance (G).....	July 2	Oct. 5	Red Pompon	S-2
Mona (G).....		Oct. 5	Small Pompon	S-2
Regina (G).....		Oct. 5	Apricot Bronze; Int. Decorative	P
Huntsman.....		Oct. 5	Reddish Bronze; Large Dec.	S-1
Firecracker.....		Oct. 5	Mahogany Bronze; Int. Dec.	P
Success (G).....		Oct. 8	Crimson; Int. Dec.	P
Red Velvet (G).....		Oct. 10	Velvety Crimson; Int. Dec.	S-2
Orangeade (G).....		Oct. 10	Orange Br.; Int. Single	P
Bamboo.....		Oct. 10	Buff Bronze; Small Single	S-1
Caravan (G).....		Oct. 10	Salmon Bronze; Int. Dec.	S-1
Orpheus.....		Oct. 10	Roman Red; Int. Pompon	P
Carmine Queen.....		Oct. 10	Carmine Red; Small Pompon	S-1
Carnival.....		Oct. 10	Burnt-Orange; Small Pompon	S-1
Nocturne.....		Oct. 12	Crimson; Small Pompon	S-1
Mrs. Du Pont (G).....		Oct. 12	Coral Buff; Large Decorative	S-1
Admiral (G).....		Oct. 12	Crimson; Int. Decorative	P
8-WEEK VARIETIES				
Robinhue.....	July 9	Oct. 15	Red; Int. Decorative	S-1
Red Ethrelda.....		Oct. 15	Coral Red; Int. Anemone	S-1
Radiance.....		Oct. 15	Red; Int. Decorative	P
Calumet.....		Oct. 15	Light Bronze; L. Pompon	S-1
Rajah.....		Oct. 15	Scarlet Red; Int. Single	S-1
Detroit.....		Oct. 15	Reddish Bronze; Small Pompon	P
James Stewart.....		Oct. 15	Apricot Gold; Small Pompon	S-1
Talisman.....		Oct. 20	Talisman Bronze; Int. Single	S-1
Paradise.....		Oct. 20	Coral Red; Int. Single	S-1
Br. Mary McArthur.....		Oct. 23	Sport of Mary McArthur	S-1
9-WEEK VARIETIES				
Gaiety.....	July 16	Oct. 25	Coral Bronze; Int. Single	S-2
Firebird.....		Oct. 25	Reddish Bronze; Int. Dec.	S-1
Bronze Dot.....		Oct. 25	Sport of Pink Dot	S-3
Buckskin.....		Oct. 25	Tawny Bronze; Small Single	S-2
Sybil.....		Oct. 30	Golden Apricot; Int. Single	P
Seneca.....		Nov. 1	Orange Red; Int. Dec.	S-1
Firefly.....		Nov. 1	Orange Red; Int. Pompon	S-1

(G) Recommended for Garden Culture.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

BRONZE AND RED POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
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9-WEEK VARIETIES—Cont'd

Bronze Daisy.....		Nov. 1	Light Bronze Sport of Yel. Daisy	S-1
Imp. Bronze Daisy.....		Nov. 1	Sport of Br. Daisy	S-1
(Katoka Red)				
Buccaneer.....		Nov. 1	Orange Apricot; Int. Single	S-2
Red Seneca.....	July 16	Nov. 1	Red Sport of Seneca	S-1
Bronze Buckingham.....		Nov. 1	Sport of Pk. Calif. Daisy	S-1
Navaho.....		Nov. 1	Red ; Int. Pompon	S-1
Red Daisy.....		Nov. 1	Red; Int. Single	S-1
Imp. Red Daisy.....		Nov. 1	Sport of Red Daisy	S-2
(Adachi Red)				

10-WEEK VARIETIES

Jetfire.....		Nov. 5	Flaming Red; Int. Decorative	S-2
Comanche.....		Nov. 5	Orange Bronze; Int. Pompon	P
Orange Beauregard.....		Nov. 5	Golden Br. Sport of Beauregard	S-4
Beauregard.....		Nov. 5	Reddish Orange; Int. Pompon	S-4
Butterscotch.....		Nov. 5	Golden Bronze; Int. Pompon	S-2
Cassandra.....		Nov. 5	Orange Bronze; Int. Pompon	S-1
Red Rust.....		Nov. 5	Reddish Bronze; Int. Dec.	S-1
Rubicon.....		Nov. 5	Bronze Red; Int. Dec.	S-3
Magician.....		Nov. 5	Bronze; L. Pompon	S-2
Bittersweet.....		Nov. 5	Bittersweet Red; Int. Single	S-2
Gypsy.....		Nov. 8	Light Br.; Small Anemone	S-2
Samovar.....		Nov. 10	Reddish Bronze; Int. Pompon	S-2
Sylvanna.....		Nov. 10	Reddish Orange; Int. Single	S-1
Chanticleer.....		Nov. 10	Reddish Bronze; L. Pompon	S-1
Firegleam.....		Nov. 10	Fiery Orange; Int. Dec.	S-1
Chevron.....		Nov. 10	Red Orange; Int. Dec.	S-2
*The Titan.....	July 23	Nov. 10	Red; Large Anemone	S-1
*Bronze Thyra.....		Nov. 10	Sport of Thyra	P
*Bronze Pandora.....		Nov. 10	Coral Bronze; Sport of Pandora	S-1
Climax.....		Nov. 10	Orange; Int. Pompon	P
Barbara Fuller.....		Nov. 10	Coral Red; Int. Anemone	S-1
*Copperhead.....		Nov. 10	Coppery Bronze; L. Dec.	S-3
Bronze Linda Lou.....		Nov. 10	Sport of Linda Lou	S-1
Amberhue.....		Nov. 10	Orange Br.; Int. Daisy	P
*Bronze Tuxedo.....		Nov. 10	L. Anemone; Sport of Tuxedo	P
Gold Braid.....		Nov. 12	Yel. Bronze-Red Center; Int. Pom.	P
Illini Regal.....		Nov. 12	Crimson; Int. Pom.	P
*Bronze Masterpiece.....		Nov. 12	Sport of Masterpiece	S-1
*Dk. Br. Masterpiece.....		Nov. 12	Sport of Br. Masterpiece	S-2
*Paragon.....		Nov. 12	Red; L. Pompon	S-2
Illini Tangier.....		Nov. 12	Reddish Bronze; L. Decorative	P
Red King.....		Nov. 13	Large Red Single	S-1
Cadet.....		Nov. 14	Red; Int. Anemone	S-1

11-WEEK VARIETIES

Mrs. Dewey.....		Nov. 15	Deep Bronze; L. Single	S-1
Shalimar.....		Nov. 15	Orange Bronze; Int. Anemone	S-1
Red Princeton.....	July 30	Nov. 15	Brazil Red; Sport of Princeton	S-1
Illini Honey.....		Nov. 15	Honey Amber; Small Pompon	S-1

* Responds to Disbudding.

BRONZE AND RED POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
11-WEEK VARIETIES—Cont'd				
Illini Redhead.....	July 30	Nov. 17	Deep Red; Small Pompon	S-1
Illini Warrior.....		Nov. 20	Bronzy Orange; Small Pompon	S-1
Legal Tender.....		Nov. 20	Bronze & Gold; Int. Dec.	S-2
Rubaiyat.....		Nov. 20	Velvet Red; Int. Formal	S-1
Rusticon.....		Nov. 20	Rust Red; Int. Pompon	S-3
Thelma.....		Nov. 20	Orange Scarlet; Int. Pompon	S-3
Bourbon.....		Nov. 20	Rust Bronze; Int. Single	S-1
Illini Warpaint.....		Nov. 22	Maroon Red; L. Decorative	P
*Olnura.....		Nov. 22	Apricot Br.; L. Anemone	P
Carousel.....		Nov. 23	Coral Bronze; Int. Single	S-1
Festival.....		Nov. 23	Apricot Red; Small Single	S-2
Bronze Minuet.....		Nov. 23	Sport of Minuet	S-2
Dark Bronze Minuet.....		Nov. 23	Salmon Bronze; Sport of Br. Minuet	P
*Red Rolinda.....		Nov. 23	Red; Int. Anemone	S-2
12-WEEK VARIETIES				
Illini Redwood.....	Aug. 6	Nov. 25	Red; Int. Pompon	S-1
*Bronze Goldsmith.....		Nov. 25	Mars Orange; Int. Dec.	S-3
Falcon.....		Nov. 25	Reddish Bronze; Int. Pompon	S-1
Yolanda.....		Nov. 25	Dk. Orange Bronze; Int. Anemone	S-1
Indian Head.....		Nov. 28	Reddish Apricot; Int. Single	S-2
*Apricot Valencia.....		Nov. 28	Sport of Valencia	S-2
*Crimson Valencia.....		Nov. 28	Sport of Valencia	S-2
Amberina.....		Dec. 1	Orange Bronze; Int. Dec.	S-1
Red Heritage.....		Dec. 1	Salmon Red; Sport of Heritage	P
Galaxy.....		Dec. 1	Orange Scarlet; Int. Single	S-3
Orange Galaxy.....		Dec. 1	Dark Sport from Galaxy	P
13-WEEK VARIETIES				
Dazzler.....	Aug. 13	Dec. 5	Coppery Bronze; Partial Anemone	S-1
*Bronze Enchantress.....		Dec. 5	Sport of Enchantress	S-1
Debonair.....		Dec. 5	Crimson Red; L. Pompon	S-2
Mahogany Viking.....		Dec. 5	Mahogany Bronze; Int. Single	S-1
*Imp. Bronze Supreme.....		Dec. 10	Large Anemone	S-1
*Red Supreme.....		Dec. 10	Sport of Dk. Pk. Supreme	S-1
Cavalcade.....		Dec. 10	Mandarin Red; Int. Pompon	P
Harlequin.....		Dec. 10	Crimson Red; Int. Decorative	S-1
Holiday.....		Dec. 10	Crimson Red; Int. Single	S-2
Pageantry.....		Dec. 10	Red; Int. Pompon	S-1
Christmas Star.....		Dec. 12	Scarlet Red; Int. Single	S-3
*Bronze Minstrel.....		Dec. 13	Coral Sport of Minstrel	S-2
*Dark Bronze Minstrel.....		Dec. 13	Reddish Bronze Sport of Minstrel	S-2
*Red Minstrel.....		Dec. 13	Red Sport of Br. Minstrel	S-1
14-WEEK VARIETIES				
Bronze Riviera.....	Aug. 20	Dec. 15	Sport of Riviera	S-2
Claret.....		Dec. 15	Brilliant Red; Int. Single	S-1
Topaz.....		Dec. 15	Orange Bronze; Int. Single	S-1
*Christmas Greeting.....		Dec. 15	Crimson Scarlet; Int. Dec.	S-3
Sarong.....		Dec. 15	Crimson; Int. Single	S-1
Merrymaker.....		Dec. 20	Scarlet Red; Int. Single	S-3
Poinsettia.....		Dec. 20	Scarlet Red; L. Single	S-3

* Responds to Disbudding.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

PINK POMPONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
6-WEEK VARIETIES				
Orchid Helen (G).....	July 2	Sept. 25	Lavender; Small Dec.	P
Early Wonder.....		Oct. 1	Lavender; Int. Pompon	S-1
Sonny		Oct. 1	Salmon Pink; Button	P
Spellbound (G).....		Oct. 1	Int. Decorative	S-3
Alex Cummings.....		Oct. 1	Salmon Pink; L. Dec.	P
7-WEEK VARIETIES				
Petrisian Mauve (G).....	July 2	Oct. 5	Int. Pompon	P
Petrisian Pink (G).....		Oct. 5	Int. Pompon	P
Petrisian Rose (G).....		Oct. 5	Int. Pompon	P
Miguel.....		Oct. 10	Strawberry Pink; Int. Dec.	P
Courtier (G).....		Oct. 10	Lavender Pink; Decorative	P
Dream Girl.....		Oct. 10	Int. Pompon	P
Corona (G).....		Oct. 10	Raspberry Pink; Int. Single	P
Lassie.....		Oct. 10	Dk. Pk.; Int. Decorative	S-1
Joybringer (G).....		Oct. 10	Salmon Rose; Int. Pompon	S-2
Sweetheart.....		Oct. 10	Light Lavender; Int. Single	P
Northern Queen.....		Oct. 12	Pink; Int. Decorative	P
Allegro (G).....		Oct. 12	Small Decorative	P
Masquerade (G).....		Oct. 12	Small Pompon	S-1
Ronnie (G).....		Oct. 12	Dk. Lavender; Small Pompon	P
Lavender Lady (G).....		Oct. 12	Light Lavender; Large Decorative	P
Sonnet (G).....		Oct. 14	Salmon Pink; Int. Pompon	P
Betty.....		Oct. 14	Lt. Salmon Pink; Int. Pompon	S-1
8-WEEK VARIETIES				
Cupid.....	July 9	Oct. 15	Pink; Dahlia Form	P
Fairyland.....		Oct. 15	Pink; Int. Decorative	S-1
Mayfair.....		Oct. 15	Pink; Int. Single	S-1
Citation.....		Oct. 15	Pink; Int. Pompon	S-1
Ethelda.....		Oct. 15	Orchid Pink; Int. Anemone	S-1
Enterprise.....		Oct. 15	Amaranth; Int. Pompon	S-1
Eliz. Hood.....		Oct. 15	Lavender; Large Pompon	S-1
Jewell.....		Oct. 15	Lavender; Small Pompon	S-2
Tsukushi Pink.....		Oct. 20	Light Pink; Int. Single	P
Mirth.....		Oct. 20	Light Pink; Int. Single	S-2
Carolyn Yosick.....		Oct. 20	Lavender; Small Decorative	S-2
Mary McArthur.....		Oct. 23	Small Pompon	S-1
Prelude.....		Oct. 24	Coral Pink; Int. Single	S-1
9-WEEK VARIETIES				
Reveille.....	July 16	Oct. 25	Pink; Small Pompon	P
Pinkette.....		Oct. 25	Pink; Int. Pompon	S-2
Vogue.....		Oct. 25	Pink; Large Single	S-2
Reward.....		Oct. 25	Int. Single	S-3
Pink Dot.....		Oct. 25	Int. Pompon	S-3
Jessie.....		Oct. 25	Lavender; Int. Pompon	S-1
*Betty Rose.....		Oct. 25	Lavender; L. Anemone	S-1
October Pink.....		Oct. 25	Int. Single	S-1

* Responds to Disbudding.

(G) Recommended for Garden Culture.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

PINK POMPONE DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
9-WEEK VARIETIES—Cont'd				
Bluechip.....		Nov. 1	Pink; Int. Decorative	S-4
Pk. Calif. Daisy..... (W. H. Buckingham)		Nov. 1	Int. Single	S-1
Rainbow.....	July 16	Nov. 1	Coral Pink; Int. Single	S-1
Ballerina.....		Nov. 1	Int. Single	S-1
*Lillian Doty.....		Nov. 1	Rose Pink; L. Pompon	S-1
Lotus.....		Nov. 3	Pink; Int. Pompon	P
Tempo.....		Nov. 3	Deep Pink; Int. Decorative	S-1

10-WEEK VARIETIES

Parsienne.....		Nov. 5	Shell Pink; Int. Single	S-2
Delight.....		Nov. 5	Pink; Int. Single	P
Dreamboat.....		Nov. 5	Lavender Pink; Int. Pompon	S-1
Dark Bulkeley.....		Nov. 8	Int. Formal Pompon	S-1
*Portrait.....		Nov. 8	Pink; Large Pompon	S-4
*Criterion.....		Nov. 8	Pink; Large Decorative	S-3
Bonnie.....		Nov. 10	Pink; Int. Pompon	P
Pennant.....		Nov. 10	Pink; Int. Decorative	S-2
Cover Girl.....		Nov. 10	Light Pink; Int. Anemone	S-1
Nobility.....		Nov. 10	Light Pink; Int. Single	S-1
Dk. Pk. Pandora.....		Nov. 10	Dk. Pk. Sport of Pandora	P
Salmon Pandora.....		Nov. 10	Salmon Sport of Pandora	P
Pandora.....	July 23	Nov. 10	Luminous Pink; L. Dec.	S-2
*Thyra.....		Nov. 10	Int. Formal Pompon	S-2
Scintillation.....		Nov. 10	Pink; Int. Pompon	P
Soprano.....		Nov. 10	Large Single	S-1
Linda Lou.....		Nov. 10	Yellow Cushion; Int. Anemone	S-2
Dark Linda Lou.....		Nov. 10	Sport of Linda Lou	S-2
*Tuxedo.....		Nov. 10	Large Anemone	S-1
*Humdinger.....		Nov. 10	Violet Purple; L. Pompon	S-3
Celebration.....		Nov. 12	Sal. Pk.; Int. Pompon	P
*Masterpiece.....		Nov. 12	Int. Pompon	S-3
*Rose Masterpiece.....		Nov. 12	Rose Pk. Sport of Masterpiece	S-2
*Salmon Masterpiece.....		Nov. 12	Salmon Pk. Sport of Masterpiece	S-1
Anthem.....		Nov. 12	Pink; Int. Anemone	P
Memorial.....		Nov. 12	Int. Anemone	S-1

11-WEEK VARIETIES

*Delmar.....		Nov. 15	Lavender Pink Int. Pompon	P
Taffeta.....		Nov. 15	Two-Tone Pink; Int. Dec.	S-3
Arbutus.....		Nov. 15	Shrimp Pink; Small Pompon	S-1
Carole.....		Nov. 15	Lt. Pk.; Salm. Cush.; Int. Anemone	P
*Dark Norma.....		Nov. 15	Deep Lavender; L. Anemone	S-2
Orchid Beauty.....		Nov. 15	Golden Cushion; Int. Anemone	S-1
Brocade.....		Nov. 15	Shell Pink; Int. Single	S-2
Illini Springtime.....	July 30	Nov. 15	Pink; Int. Single	P
Polka.....		Nov. 20	Pink; Int. Anemone	P
Nugano.....		Nov. 20	Pink; Int. Pompon	S-1
Grand Slam.....		Nov. 20	Silvery Shell Pk.; L. Single	S-2
*Almega.....		Nov. 20	Lavender Pink; Large Pompon	S-3
*Vivacious Lady.....		Nov. 20	Spoon Type Novelty	S-1
*Pink L. I. Beauty.....		Nov. 20	Lt. Pk. Sport of L. I. Beauty	S-2

* Responds to Disbudding.

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

FINE MIMONS, DECORATIVES, SINGLES AND ANEMONES

Variety	Last Pinch	Flowering Date	Description	Price Classification
11-WEEK VARIETIES—Cont'd				
Pinky.....	July 30	Nov. 20	Int. Decorative	S-1
*Dark L. I. Beauty.....		Nov. 20	Imp. Pink. L. I. Beauty	S-1
Majorette.....		Nov. 20	Int. Anemone	S-1
Minuet.....		Nov. 23	Int. Pompon	S-3
Dark Pink Minuet.....		Nov. 23	Deep Pink Sport of Minuet	P
Illini Formal.....		Nov. 23	Rose Pink; Int. Pompon	S-1
12-WEEK VARIETIES				
Illini Roseglow.....	Aug. 6	Nov. 25	Pink; Int. Pompon	P
Pink Cloud.....		Nov. 25	Light Pink; Int. Decorative	S-1
Princess.....		Nov. 25	Small Pompon	S-2
Hasegawa Pink.....		Nov. 25	Lavender; Int. Single	S-1
*Beautiful Lady.....		Nov. 25	Lavender; L. Anemone	S-3
*Valencia.....		Nov. 28	Orchid Pk.; Large Single	S-2
*Dark Valencia.....		Nov. 28	Sport of Valencia	S-3
*Dubonnet Valencia.....		Nov. 28	Deep Orchid Sport of Valencia	S-1
*Orchid Valencia.....		Nov. 28	Orchid Sport of Valencia	S-1
*Salmon Valencia.....		Nov. 28	Salmon Pink Sport of Valencia	S-1
Heritage.....		Dec. 1	Dark Pink; L. Formal Pompon	S-2
13-WEEK VARIETIES				
*Enchantress.....	Aug. 13	Dec. 5	Large Anemone	S-2
*Dark Enchantress.....		Dec. 5	Deep Pk. Sport of Enchantress	S-2
Argyle.....		Dec. 10	Pink; Small Pompon	S-1
Debutante.....		Dec. 10	Large Single	S-3
*Pink Supreme.....		Dec. 10	Large Anemone	S-1
*Imp. Dark Supreme.....		Dec. 10	Sport of Dk. Pk. Supreme	S-2
*Minstrel.....		Dec. 13	Int. Formal Pompon	S-3
*Lt. Pk. Minstrel.....		Dec. 13	Sport of Minstrel	S-2
*Dk. Pk. Minstrel.....		Dec. 13	Sport of Minstrel	S-1
*Imp. Pk. Minstrel.....		Dec. 13	Sport of Minstrel	S-1
14-WEEK VARIETIES				
Riviera.....	Aug. 20	Dec. 15	Luminous Pink; Int. Dec.	S-3
Serrated Riviera.....		Dec. 15	Sport of Riviera	S-1
Coronet.....		Dec. 15	Dark Pink; Int. Single	S-1
Rosalind.....		Dec. 20	Int. Single	S-2
Defiance.....		Dec. 20	Int. Decorative	S-2
Medallion.....		Dec. 20	Int. Pompon	S-2
Rose Medallion.....		Dec. 20	Sport of Medallion	S-2
Lynda McLane.....		Dec. 25	Pink; Int. Pompon	P
Alvoda.....		Dec. 25	Pink; Large Decorative	P
Sophila.....		Dec. 25	Pink; Int. Pompon	P

* Responds to Disbudding.

WHITE STANDARDS

Variety	Last Pinch	Select Bud	Flowering Date	Description	Price Classification
8-WEEK VARIETIES					
Silver Sheen.....	July 9	Aug. 30	Oct. 20	Int. Incurred	S-3
White Chief.....		Aug. 30	Oct. 20	Int. Incurred	S-2
Christina.....		Aug. 30	Oct. 23	Small Incurred	S-2
Marblehead.....		Aug. 30	Oct. 25	Small Incurred	P
9-WEEK VARIETIES					
Ambassador.....	July 16	Aug. 30	Oct. 25	Cream White; Int. Semi-Incurred	S-2
Luna.....		Aug. 30	Oct. 25	Small Incurred	P
Albatross.....		Sept. 5	Nov. 1	Pure White; Int. Incurred	S-4
10-WEEK VARIETIES					
Giant Betsy Ross.....	July 23	Sept. 5	Nov. 5	Sport of Betsy Ross	S-4
Indianapolis White.....		Sept. 5	Nov. 5	Int. Incurred	S-5
Jean Elizabeth.....		Sept. 8	Nov. 10	L. Semi-Incurred	S-2
Crystal Queen.....		Sept. 8	Nov. 10	Imp. Jean Elizabeth	S-3
White Pockett.....		Sept. 8	Nov. 10	Large Incurred	S-2
Monument.....		Sept. 8	Nov. 10	Ivory White; Int. Incurred	S-3
11-WEEK VARIETIES					
Sterling.....	July 30	Sept. 10	Nov. 15	Large Incurred	S-2
Marketeer.....		Sept. 15	Nov. 18	Int. Semi-Incurred	S-3
Mefo.....		Sept. 20	Nov. 20	Ivory White; L. Incurred	S-4
Cream Mefo.....		Sept. 20	Nov. 20	Cream Sport of Mefo	S-2
White Frick.....		Sept. 20	Nov. 20	Int. Incurred	S-2
Indiana Market.....		Sept. 20	Nov. 20	Int. Incurred	S-1
12-WEEK VARIETIES					
White Peter John.....	Aug. 6	Sept. 30	Nov. 25	Int. Reflexed	S-1
Chattanooga.....		Sept. 30	Nov. 25	Large Incurred	S-3
December Glory.....		Oct. 1	Dec. 1	Ivory White; Int. Incurred	S-3
Margaret Moeller.....		Oct. 1	Dec. 3	Int. Incurred	S-2
13-WEEK VARIETIES					
December White.....	Aug. 13	Oct. 5	Dec. 5	Int. Incurred	S-2
White Mistletoe.....		Oct. 5	Dec. 5	Int. Incurred	S-1
Snowline.....		Oct. 8	Dec. 10	Large Incurred	S-2
Smith's White.....		Oct. 8	Dec. 13	Int. Semi-Incurred	S-3
Smith's Cream White.....		Oct. 8	Dec. 13	Int. Semi-Incurred	P

YELLOW STANDARDS

8-WEEK VARIETIES					
Harvest Golden.....	July 9	Aug. 25	Oct. 15	Large Decorative	S-2
Honeysweet.....		Aug. 25	Oct. 15	Semi-Incurred Disbud	P
Gold Lode.....		Aug. 25	Oct. 15	Int. Reflexed	S-2
Valiant.....		Aug. 25	Oct. 15	Small Semi-Incurred	P
Celestra.....		Aug. 25	Oct. 15	Small Semi-Incurred	S-1
Sunburst.....		Aug. 30	Oct. 20	Int. Reflexed Dec.	P
Mrs Kidder.....		Aug. 30	Oct. 20	Int. Incurred	S-2
Butterball.....		Aug. 30	Oct. 20	Int. Incurred	S-2
Blazing Gold.....		Aug. 30	Oct. 23	Golden Yellow; Int. Semi-Incurred	S-4
Georgia.....		Aug. 30	Oct. 24	Dk. Yel.; Small incurred	P
9-WEEK VARIETIES					
Smith Superlative.....	July 16	Aug. 30	Oct. 25	Golden Yellow; Int. Semi-Incurred	P
Yellow Ambassador.....		Aug. 30	Oct. 25	Sport of Ambassador	S-2
Sunglow.....		Aug. 30	Oct. 25	Golden Yellow; Int. Incurred	S-2
Golden Glory.....		Sept. 5	Nov. 1	Golden Yellow; Int. Incurred	S-1
Good News.....		Sept. 5	Nov. 1	Int. Incurred	S-5
Yellow Ivanhoe.....		Sept. 5	Nov. 1	Sport of Ivanhoe	S-2
10-WEEK VARIETIES					
Imp. Ind. Yellow.....	July 23	Sept. 5	Nov. 5	Sport of Ind. Yellow	S-4
Indianapolis Yellow.....		Sept. 5	Nov. 5	Int. Incurred	S-5
Dk. Indianapolis Yellow.....		Sept. 5	Nov. 5	Sport of Ind. Yellow	S-4
Yellow Queen.....		Sept. 8	Nov. 10	Sport of Orchid Queen	S-3
Jamboree.....		Sept. 8	Nov. 10	Golden Yellow; Int. Incurred	S-1
Yellow Pockett.....		Sept. 8	Nov. 10	Large Incurred	S-2
Yellow Monument.....		Sept. 8	Nov. 10	Sport of Monument	S-3
Honey Dew.....		Sept. 8	Nov. 12	Int. Incurred	S-2
11-WEEK VARIETIES					
Yellow Marketeer.....	July 30	Sept. 15	Nov. 18	Sport of Marketeer	S-2
Bonnaffon Deluxe.....		Sept. 20	Nov. 20	Small Incurred	S-5
Friendly Rival.....		Sept. 20	Nov. 20	Int. Incurred	S-3
Yellow Mefo.....		Sept. 20	Nov. 20	Sport of Mefo	S-4
Purdue.....		Sept. 25	Nov. 20	Int. Incurred	S-1
Harvester.....		Sept. 20	Nov. 23	Int. Incurred	S-3
Marie DePetris.....		Sept. 25	Nov. 23	Golden Yellow; Int. Incurred	S-3

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE TABLE ON PAGE 93 FOR PRICES.

YELLOW STANDARDS—Cont'd

Variety	Last Pinch	Select Bud	Flowering Date	Description	Price Classification
12-WEEK VARIETIES					
Yellow Peter John.....	Aug. 6	Sept. 30	Nov. 25	Int. Reflexed	S-1
Dk. Yel. Chattanooga.....		Sept. 30	Nov. 25	Sport of Chattanooga	S-2
Yellow Chattanooga.....		Sept. 30	Nov. 25	Sport of Chattanooga	S-2
Golden Pearson.....		Sept. 30	Nov. 25	Int. Incurred	S-3
Sungold.....		Sept. 30	Nov. 25	Int. Incurred	S-1
Mrs. Calkins.....		Sept. 30	Nov. 25	Golden-Yel. Semi Inc.	S-1
Yellow Glory.....		Oct. 1	Dec. 1	Sport of Dec. Glory	S-1
Golden Mrs. Ross.....		Oct. 1	Dec. 3	Golden Yellow; L. Incurred	S-3
Yellow Moeller.....		Oct. 1	Dec. 3	Sport of Margaret Moeller	S-2
13-WEEK VARIETIES					
Golden Mistletoe.....	Aug. 13	Oct. 5	Dec. 5	Int. Incurred	S-1
Chalice.....		Oct. 5	Dec. 5	Int. Incurred	S-1
Tobin's Yellow.....		Oct. 8	Dec. 13	Int. Semi-Incurred	S-3
Meteore.....		Oct. 8	Dec. 13	Int. Semi-Incurred	S-2
Dauntless.....		Oct. 8	Dec. 13	Golden Yellow; Semi-Incurred	S-1

BRONZE and RED STANDARDS

8-WEEK VARIETIES					
Mayford's Triumph.....	July 9	Aug. 30	Oct. 15	Orange Bronze Dec.	S-1
Amber Bright.....		Aug. 30	Oct. 15	Golden Bronze Semi-Inc.	S-1
9-WEEK VARIETIES					
Hilda Bergen.....	July 16	Aug. 30	Oct. 25	Int. Incurred	S-2
Glitters.....		Sept. 1	Oct. 28	Reddish Orange; Int. Reflexed	S-1
Red Glitters.....		Sept. 1	Oct. 28	Sport of Glitters	S-1
Ivanhoe.....		Sept. 5	Nov. 1	Reddish Bronze; Small Incurred	S-2
Apricot Queen.....		Sept. 5	Nov. 1	Orange Bronze; Int. Incurred	S-2
Detroit News.....		Sept. 5	Nov. 1	Reddish Bronze; Int. Incurred	S-4
10-WEEK VARIETIES					
Indianapolis Bronze.....	July 23	Sept. 5	Nov. 5	Int. Incurred	S-4
Indianapolis Apricot.....		Sept. 5	Nov. 5	Sport of Ind. Bronze	S-1
Dark Ind. Bronze.....		Sept. 5	Nov. 5	Sport of Ind. Bronze	S-3
Anaconda.....		Sept. 7	Nov. 8	Coppery Red; Large Incurred	S-2
Oakdale.....		Sept. 8	Nov. 10	Buff Bronze; Int. Incurred	P
Mrs. Stahelin.....		Sept. 8	Nov. 10	Reddish Bronze; Int. Incurred	S-1
Bronze Orchid Queen.....		Sept. 8	Nov. 10	Sport of Orchid Queen	S-2
Mrs. Roy.....		Sept. 10	Nov. 13	Red; Int. Incurred	S-3
Garnet King.....		Sept. 10	Nov. 13	Deep Red; Int. Reflexed	S-2
11-WEEK VARIETIES					
Calvert's Gold.....	July 30	Sept. 20	Nov. 20	Amber Br.; Int. Incurred	P
Bronze Frick.....		Sept. 20	Nov. 20	Sport of Helen Frick	S-2
12-WEEK VARIETIES					
Bronze Peter John.....	Aug. 6	Sept. 30	Nov. 25	Int. Reflexed	S-1
Gladys Pearson.....		Sept. 30	Nov. 25	Buff Bronze; Int. Incurred	S-2
Oak Leaf.....		Sept. 30	Nov. 25	Deep Bronze; Int. Incurred	S-3
Muto's Crimson.....		Oct. 1	Dec. 1	Red; Int. Semi-Incurred	S-2
13-WEEK VARIETY					
Bronze Mistletoe.....	Aug. 13	Oct. 5	Dec. 5	Int. Incurred	S-1

PINK STANDARDS

8-WEEK VARIETIES					
Pink Chief	July 9	Aug. 25	Oct. 15	Lavender; Int. Incurred	S-2
Major Bowes		Aug. 30	Oct. 20	Lavender; Int. Incurred	S-1
9-WEEK VARIETY					
Sugarplum	July 16	Sept. 5	Nov. 1	Int. Incurred	S-1
10-WEEK VARIETIES					
J. W. Prince	July 23	Sept. 5	Nov. 5	Lav.; Int. Incurred	S-2
Indianapolis Pink		Sept. 5	Nov. 5	Int. Incurred	S-4
Orchid Queen		Sept. 8	Nov. 10	Orchid Pink; Semi-Incurred	S-2
Lavender Queen		Sept. 8	Nov. 10	Sport of Orchid Queen	S-3
Dark Orchid Queen		Sept. 8	Nov. 10	Deep Pink Sport of Orch. Queen	S-3
Pink Pockett		Sept. 8	Nov. 10	Large Incurred	S-2
11-WEEK VARIETIES					
Calvert's Pink	July 30	Sept. 20	Nov. 17	Orchid. Int. Incurred	P
Helen Frick		Sept. 20	Nov. 20	Rose Pink; Int. Incurred	S-2
Thanksgiving Pink		Sept. 25	Nov. 23	Deep Pink; Int. Reflexed	S-2
Ed. Seidewitz		Sept. 25	Nov. 23	Lavender; Int. Incurred	S-2
13-WEEK VARIETY					
Pink Peter John	Aug. 13	Sept. 30	Nov. 25	Int. Reflexed	S-1
Dk. Pink Peter John		Sept. 30	Nov. 25	Int. Reflexed	S-1
Pink Mistletoe		Oct. 5	Dec. 5	Int. Incurred	S-1

Odd-Flowered Spider Types

Variety	Last Pinch	Select Bud	Flowering Date	Description	Price Classification
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9-WEEK VARIETIES

Silver Queen.....		Sept. 3	Oct. 25	White Fuji	S-1
Moribana.....		Sept. 3	Oct. 25	Yellow Spider	S-1
Luyona.....		Sept. 3	Oct. 25	Yellow Spider	S-1
Dalwin.....		Sept. 3	Oct. 25	Bronze Spider	P
Queen's Lace.....		Sept. 5	Nov. 1	White Spider	S-3
Kay Tashima.....		Sept. 5	Nov. 1	White Spider	S-1
White Mary Garden.....	July 16	Sept. 5	Nov. 1	White Fuji	S-1
Yellow Lace.....		Sept. 5	Nov. 1	Yellow Spider	S-3
Gold Lace.....		Sept. 5	Nov. 1	Imp. Yellow Lace	S-3
Hooked Yellow Lace.....		Sept. 5	Nov. 1	Sport Yel. Lace	S-1
Antique.....		Sept. 5	Nov. 1	Bronze Spider	P
Mrs. Walker.....		Sept. 5	Nov. 1	Deep Lavender Spider	S-1
Mary Garden.....		Sept. 5	Nov. 1	Pink Spider	S-2

10-WEEK VARIETIES

White Rayonnante.....		Sept. 5	Nov. 5	White Fuji	S-2
Yellow Rayonnante.....		Sept. 5	Nov. 5	Yellow Fuji	S-2
Yellow Curly Spider.....		Sept. 5	Nov. 5	Yellow Spider	P
Waikiki.....		Sept. 5	Nov. 5	Apricot Bronze Spider	S-1
Gena Harwood (Br. Rayonnante).....	July 23	Sept. 5	Nov. 5	Bronze Fuji	S-1
Nomago.....		Sept. 5	Nov. 5	Bronze Fuji	S-1
Mamoru.....		Sept. 5	Nov. 5	Buff Bronze Spider	S-1
Rayonnante.....		Sept. 5	Nov. 5	Pink Fuji	S-2
Susan Leighton.....		Sept. 5	Nov. 6	White Spider	S-1
Peggy Ann Hoover.....		Sept. 5	Nov. 10	Pink Spider	S-1

11-WEEK VARIETIES

Lorraine.....	July 30	Sept. 10	Nov. 15	Yellow Spider	S-1
Mrs. Eisenhower.....		Sept. 10	Nov. 18	Golden Bronze Spider	S-1

Selected Pot Plant Varieties

Variety	Last Pinch	Spray or Disbud	Date Flowering	Type	Price Classification
WHITE					
9-WEEK VARIETIES					
Luna.....	Aug. 27	Disbud	Oct. 25	Small Inc.	P
Monty.....	Aug. 27	Disbud	Oct. 25	L.F. Dec.	P
Granite State.....	Aug. 27	Disbud	Oct. 25	L.F. Inc.	S-3
Wilson's White.....	Aug. 27	Disbud	Nov. 1	L.F. Inc.	S-5
Alaska.....	Sept. 3	Disbud	Nov. 1	Int. Anem.	P
10-WEEK VARIETIES					
Indianapolis White.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-5
Richard Mandel.....	Sept. 3	Disbud	Nov. 5	L.F. Inc.	S-1
Little America.....	Sept. 3	Disbud	Nov. 10	Int. Anem.	S-3
Pacesetter.....	Sept. 3	Disbud	Nov. 10	L. Single	S-3
YELLOW					
8-WEEK VARIETIES					
Honeysweet.....	Aug. 27	Disbud	Oct. 15	Small Inc.	P
Valiant.....	Aug. 27	Disbud	Oct. 15	Small Inc.	P
Sunburst.....	Aug. 27	Disbud	Oct. 20	Int. Ref.	P
Blazing Gold.....	Aug. 27	Disbud	Oct. 23	L.F. Inc.	S-4
Georgia.....	Aug. 27	Disbud	Oct. 24	Int. Inc.	P
9-WEEK VARIETIES					
Yellow Lace.....	Sept. 10	Disbud	Nov. 1	Spider	S-3
Gold Lace.....	Sept. 10	Disbud	Nov. 1	Spider	S-3
Hooked Yellow Lace.....	Sept. 10	Disbud	Nov. 1	Spider	S-1
10-WEEK VARIETIES					
Dk. Indianapolis Yellow.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-4
Indianapolis Yellow.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-5
Jealousy.....	Sept. 10	Spray	Nov. 10	Small Pompon	P
11-WEEK VARIETIES					
Bonnaffon Deluxe.....	Sept. 10	Disbud	Nov. 20	L.F. Inc.	S-5
Calvert's Gold.....	Sept. 10	Disbud	Nov. 20	Int. Inc.	P
BRONZE and RED					
8-WEEK VARIETY					
Red Ethrelda.....	Aug. 27	Disbud	Oct. 15	Int. Anem.	S-1
10-WEEK VARIETIES					
Indianapolis Apricot.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-1
Indianapolis Bronze.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-4
Indianapolis Gold. Bronze.....	Sept. 10	Disbud	Nov. 5	Quilled	S-1
Dark Indianapolis Bronze.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-3
Delaware.....	Sept. 3	Disbud	Nov. 10	L.F. Inc.	P-1
Barbara Fuller.....	Sept. 3	Disbud	Nov. 10	L. Anem.	S-3
PINK					
8-WEEK VARIETIES					
Cupid.....	Aug. 27	Disbud	Oct. 15	Small Dec.	P
Ethrelda.....	Aug. 27	Disbud	Oct. 15	Int. Anem.	S-1
10-WEEK VARIETIES					
Indianapolis Pink.....	Sept. 10	Disbud	Nov. 5	L.F. Inc.	S-4
Portrait.....	Sept. 3	Disbud	Nov. 8	L. Pom.	S-4
Criterion.....	Sept. 3	Disbud	Nov. 8	L. Pom.	S-3
Humdinger.....	Sept. 3	Disbud	Nov. 10	L. Pom.	S-3
Queen of Pinks.....	Sept. 3	Disbud	Nov. 10	L. Pom.	S-4
11-WEEK VARIETY					
Calvert's Pink.....	Sept. 10	Disbud	Nov. 17	L.F. Inc.	P

New Introductions — Garden Varieties

WHITE

GLORIA

Sept. 15

A very free flowering medium sized decorative pompon. Flowers are larger and more double than Chris Columbus. Good growth habits and foliage.

BENORA

Sept. 20

Dwarf cushion type growth with excellent stems and foliage. Large 3" white flowers on well shaped plants.

YELLOW

ASTORIA

Sept. 28

A very free flowering plant producing numerous sprays of deep lemon pompons on stiff stems.

FREYA

Oct. 1

Very large deep golden yellow 4" blooms produced on medium upright growth with excellent stems and foliage. Good flower placement.

MICHIGAN

Oct. 12

Large clear yellow blooms fully 4" and larger across produced on beautiful vigorous plants with rigid stems. Should be disbudded and supported due to size of bloom. Good outside cut flower when protected from frost.

CARIOCA

Oct. 12

Another large flowered addition to the late garden varieties. Should be disbudded. Blooms are fully 4" across. Large decorative type, flowers are golden yellow and produced on good stems and foliage.

BRONZE and RED

TORONTO

Sept. 20

Luminous bronze cushion type growth, producing masses of blooms on bushy plants. Excellent border variety.

MOROCCO

Oct. 1

Dwarf cushion type growth producing 3½" blooms in large quantities on well shaped plants. A reddish bronze border plant.

CAPRICE

Oct. 1

Large full decorative 4" blooms having a good deep apricot color. Strong bushy semi-dwarf growth with excellent foliage.

GRANADA

Oct. 8

Very free flowering deep coppery bronze decorative intermediate size flower produced in masses on excellent stem and foliage. Medium height. Good secondary border plant.

GLADIATOR

Oct. 10

Large 4" full decorative orange red blooms produced on plants of medium height with upright stems and good foliage. Very free flowering considering size of bloom. Try disbudding this one.

CRUSADER

Oct. 12

Large double crimson red blooms 4 or more inches (larger when disbudded) produced on strong robust stems with very strong flower petioles. This is an outstanding specimen variety when disbudded for the late Mum garden or as China Mums.

PINK

MAYFLOWER

Oct. 1

Very hard solid pompons, soft luminous pink, borne atop perfect sprays and rigid stems. Excellent early cut flower.

Price on Above Varieties: \$7.50 per 50; 100-250, \$14.75 per 100; 300-450, \$14.50 per 100; 500-950, \$14.25 per 100; 1000 up, \$14.00 per 100.

SPECIAL COLLECTIONS OF GARDEN VARIETIES

For growers who are not familiar with Garden Varieties, but who want a well-balanced assortment, we offer the following collections which include the better varieties.

MINIMUM COLLECTION IS 300 CUTTINGS

SPECIAL No. 1

Rooted Cuttings
Our selection
Ten taller varieties
for cutting.

SPECIAL No. 2

Rooted Cuttings
Our selection for
borders or bedding.

SPECIAL No. 3

Rooted Cuttings
Our selection
Half for cutting
Half for bedding.

SPECIAL No. 4

Rooted Cuttings
Our selection for
Easter, Mother's Day
or Memorial Day Pots
(Specify Blooming Date)

SPECIAL No. 5

Cushion Varieties
Only.

PRICES PER 100

300-550
5.00

600-850
4.75

900 Up
4.25

PRICES PER 100

PRICE 50 ONLY	100-250	300-450	500-950	1000 Up
2.75	5.25	5.00	4.75	4.50
3.00	5.75	5.50	5.25	5.00
3.25	6.25	6.00	5.75	5.50
3.50	6.75	6.50	6.25	6.00
3.75	7.25	7.00	6.75	6.50
4.00	7.75	7.50	7.25	7.00
5.00	9.75	9.50	9.25	9.00
6.25	12.25	12.00	11.75	11.50
7.50	14.75	14.50	14.25	14.00

Garden Varieties

SYMBOLS — (L) Large — (D) Decorative — (P) Pompon — (C) Cushion — (S) Single — (B) Button — (C-F) Carnation Flowered.

*Recommended for Mother's Day pot plants — pinched and short day treatment same day.

D Varieties recommended as better when disbudded.

Variety	Size and Type	Color	Height	Matures	Price per 50
WHITE					
Osage.....	(CD)	White	Med.	Sept. 5	5.00
Candlelight.....	(D)	Ivory	Med.	Sept. 5	3.00
D. Ahrens.....	(D)	White	Tall	Sept. 10	3.00
Paper White.....	(D)	White	Med.	Sept. 10	3.50
*Crystal Maid.....	(D)	Cream	Short	Sept. 12	6.25
*Chris Columbus.....	(LD)	Cream	Tall	Sept. 15	3.25
Wh. Cushion.....	(CD)	White	Short	Sept. 15	3.00
Gloria (New).....	(DP)	White	Med.	Sept. 15	7.50
*Calcite.....	(D)	Cream	Med.	Sept. 15	3.00
*Martens White.....	(LD)	White	Med.	Sept. 15	3.75
Powderpuff (Cushion).....	(CD)	White	Short	Sept. 15	3.50
Polar Ice.....	(LD)	White	Med.	Sept. 15	3.50
*Wh. Bounty.....	(B)	White	Tall	Sept. 15	3.25
D Wh. Tower.....	(LP)	Cream	Tall	Sept. 15	3.25
*Snowspoon.....	(Spoon)	White	Med.	Sept. 18	6.25
Benora (New).....	(CD)	White	Short	Sept. 20	7.50
Wh. Wonder.....	(LP)	Ivory	Med.	Sept. 25	3.75
*Shalimar (H).....	(LP)	Cream	Med.	Sept. 25	3.50
White Rice.....	(LP)	White	Short	Sept. 25	3.50
*Ostosa.....	(CP)	White	Short	Sept. 25	3.75
Wh. Cloud.....	(D)	White	Tall	Sept. 25	3.75
North Star.....	(S)	White	Med.	Sept. 28	3.50
*Pepita.....	(B)	White	Med.	Sept. 28	3.75
Spindrift.....	(D)	White	Med.	Oct. 1	4.00
Gardenia.....	(LD)	White	Med.	Oct. 1	4.00
Snowfall.....	(D)	White	Med.	Oct. 1	3.50
Ermine.....	(D)	Ivory	Med.	Oct. 1	3.50
*Marshmallow.....	(M-Sgl)	White	Med.	Oct. 5	3.75
Limelight.....	(P)	White	Med.	Oct. 5	3.75
*Lyric.....	(CS)	White	Short	Oct. 5	3.75
Avalanche.....	(LD)	Cream	Tall	Oct. 5	3.75
*Horizon.....	(P)	White	Med.	Oct. 5	3.50
Youdath's Wh.....	(LD)	White	Med.	Oct. 5	3.00
D Ivory Glow.....	(D)	White	Med.	Oct. 5	3.00
*Classic.....	(B)	White	Tall	Oct. 10	3.75
*Maestro.....	(CP)	White	Short	Oct. 10	3.75
Wh. Spoon.....	(Spoon)	White	Med.	Oct. 10	3.50
*Silverplate.....	(D)	White	Med.	Oct. 12	3.50
Silver Ball.....	(P)	White	Tall	Oct. 15	3.00
Irene.....	(B)	White	Med.	Oct. 15	4.00
Norona.....	(SP)	White	Med.	Oct. 15	3.25

YELLOW

Pathfinder.....	(C-F)	Lemon	Med.	Aug. 28	5.00
Reverence.....	(LD)	Chamois Yel.	Short	Sept. 1	6.25
*Early Gold.....	(P)	Golden	Short	Sept. 5	3.75
Golden Hours.....	(P)	Chrome Yel.	Med.	Sept. 8	3.25
Delight (H).....	(P)	Golden	Med.	Sept. 8	3.75
Genista.....	(C)	Canary	Med.	Sept. 12	4.00
Yel. Supreme (H).....	(C)	Br. Lemon	Short	Sept. 15	3.00
Sunapee.....	(P)	Lemon Yel.	Tall	Sept. 15	3.50
*Pomponette.....	(P)	Golden	Short	Sept. 15	3.25
Yel. Cushion.....	(CD)	Light Yel.	Short	Sept. 15	3.00
Golden Cushion.....	(C)	Golden Yel.	Short	Sept. 15	3.00
Defiance (H).....	(D)	Golden Yel.	Tall	Sept. 15	3.50
*Yel. Chris Columbus.....	(LD)	Br. Lemon	Med.	Sept. 15	3.25
Muriel Rice.....	(LD)	Lemon Yel.	Med.	Sept. 15	7.50
*Early Yellow.....	(B)	Dp. Lemon	Short	Sept. 15	3.00
Golden Carpet.....	(CP)	Golden	Short	Sept. 15	3.50
*D Ming.....	(P)	Orange Yel.	Med.	Sept. 18	4.00
Golden Gopher.....	(D)	Orange Yel.	Med.	Sept. 20	3.50
*Sept. Sunshine.....	(S)	Br. Lemon	Med.	Sept. 20	3.25

Garden Varieties

Variety	Size and Type	Color	Height	Matures	per 50
YELLOW (Cont'd)					
*Aglow.....	(P)	Orange	Med.	Sept. 20	5.00
Real Gold.....	(LD)	Golden Yel.	Med.	Sept. 20	7.50
Wychwood.....	(LP)	Canary	Med.	Sept. 20	3.25
Canary Wonder.....	(P)	Canary	Med.	Sept. 25	3.25
Golden Wonder.....	(P)	Golden	Med.	Sept. 25	4.00
Chas. Nye.....	(LP)	Dp. Lemon	Tall	Sept. 25	3.75
September Gold.....	(C)	Lemon Yel.	Short	Sept. 25	3.50
Golden Sunset.....	(LD)	Copper Gold	Med.	Sept. 25	3.50
Spellbinder.....	(LD)	Bright Yel.	Med.	Sept. 25	7.50
*Honeycomb.....	(P)	Golden	Med.	Sept. 25	3.75
*Moonlight.....	(D)	Br. Yellow	Med.	Sept. 25	3.75
Lee Powell.....	(LD)	Chinese Yel.	Tall	Sept. 25	3.75
Sulphur Spoon.....	(Spoon)	Lemon Yel.	Med.	Sept. 25	4.00
Tangerine.....	(LD)	Dp. Orange	Med.	Sept. 25	3.25
Freya (New).....	(LD)	Golden Yel.	Med.	Oct. 1	7.50
Flaxen Beauty.....	(LD)	Lt. Lemon	Med.	Oct. 1	3.75
Astoria (New).....	(P)	Deep Lemon	Med.	Sept. 28	7.50
Tranquility.....	(D)	Lt. Lemon	Med.	Oct. 1	6.25
*Chiquita.....	(B)	Dp. Lemon	Med.	Oct. 1	3.25
Moonbeams.....	(P)	Pale Lemon	Med.	Oct. 1	3.75
Ethel Waters.....	(LD)	Lemon	Med.	Oct. 5	4.00
James Eadie.....	(LP)	Dp. Chrome	Med.	Oct. 5	3.25
Yel. Avalanche.....	(LD)	Lt. Lemon	Tall	Oct. 5	3.25
*Garland.....	(S)	Lemon	Short	Oct. 5	3.50
Polaris.....	(S)	Golden Buff	Med.	Oct. 5	4.00
*D Mrs. Rotan.....	(LD)	Dp. Chrome	Med.	Oct. 5	3.25
Sunstone.....	(Spoon)	Lt. Yellow	Tall	Oct. 8	3.75
*Spode.....	(L-Inc.)	Lemon	Short	Oct. 8	6.25
*Yel. Spoon.....	(Spoon)	Lt. Yellow	Med.	Oct. 10	3.25
Treasure.....	(P)	Golden	Tall	Oct. 10	3.75
Golden Spoon.....	(Spoon)	Golden	Med.	Oct. 10	3.50
*Yel. Blanket.....	(B)	Br. Lemon	Med.	Oct. 10	3.25
Br. Forecast.....	(P)	Br. Lemon	Med.	Oct. 10	3.50
*Goldrush.....	(S)	Lemon	Med.	Oct. 10	3.75
Arlora.....	(LD)	Lemon	Med.	Oct. 10	3.75
Sweepstake.....	(P)	Lemon	Med.	Oct. 12	3.75
*Lemonade.....	(P)	Ivory Yel.	Med.	Oct. 12	3.75
Michigan (New).....	(LD)	Yellow	Med.	Oct. 12	7.50
Sunburst (New).....	(LD)	Golden Yel.	Med.	Oct. 12	7.50
Carioca (New).....	(LD)	Golden Yel.	Med.	Oct. 12	7.50
*Gold Lode.....	(L-Inc.)	Golden	Med.	Oct. 15	3.50
Judith Anderson.....	(B)	Golden Yel.	Med.	Oct. 15	3.25
Rodell Imp.....	(B)	Lt. Lemon	Med.	Oct. 15	3.00
Yel. Irene.....	(B)	Lt. Lemon	Med.	Oct. 15	3.25
Buttercup (H).....	(L-Inc.)	Golden	Short	Oct. 15	5.00
Sundew.....	(LD)	Golden Yel.	Med.	Oct. 15	4.00
*Valiant.....	(L-Inc.)	Lt. Golden	Med.	Oct. 15	6.25
*Honeysweef.....	(L-Inc.)	Golden Yel.	Med.	Oct. 15	6.25
Sarasota.....	(P)	Br. Lemon	Med.	Oct. 15	5.00
Golden Cheer.....	(P)	Lemon Yel.	Tall	Oct. 15	3.75

BRONZE and RED

Harvest Bronze.....	(D)	Apricot Br.	Short	Aug. 20	4.00
Glow Worm.....	(D)	Or. Scarlet	Short	Sept. 8	3.75
Early Harvest.....	(CD)	Mah. Orange	Short	Sept. 8	3.75
Harbinger.....	(D)	Golden Br.	Short	Sept. 8	3.75
*W. P. Snyder.....	(LP)	Apr. Orange	Med.	Sept. 10	3.75
Autumn Song.....	(D)	Wine Rose	Med.	Sept. 10	3.25
Geo. Luxton.....	(LD)	Light Br.	Med.	Sept. 12	6.25
Autumn Tide.....	(D)	Coral Salmon	Med.	Sept. 15	3.25
Bronze Pomponette.....	(P)	Golden Br.	Short	Sept. 15	5.00
Early Crimson.....	(D)	Bright Crim.	Med.	Sept. 15	4.00
Apache.....	(LD)	Red & Gold	Med.	Sept. 15	5.00
Early Bronze.....	(B)	Orange Br.	Short	Sept. 15	3.00
Red Gold.....	(B)	Red & Gold	Med.	Sept. 15	3.50
New Marjorie Mills.....	(LP)	Ruby Red	Short	Sept. 15	7.50

Garden Varieties

Variety	Size and Type	Color	Height	Matures	Price per 50
BRONZE and RED (Cont'd)					
Orloma	(C)	Apr. Bronze	Med.	Sept. 15	4.00
Chippa Red	(LD)	Maroon Red	Med.	Sept. 15	7.50
Flamboyant	(D)	Orange Br.	Med.	Sept. 15	6.25
Early Kathleen	(D)	Coppery Br.	Med.	Sept. 15	5.00
Autumn Beauty	(D)	Chestnut Red	Med.	Sept. 15	4.00
Sept. Bronze	(B)	Golden Br.	Med.	Sept. 20	3.00
Toronto (New)	(C)	Bronze	Short	Sept. 20	7.50
Goblin	(P)	Golden Br.	Tall	Sept. 20	3.50
Red Glow	(P)	Dark Red	Med.	Sept. 20	3.75
*Orsona	(C)	Red & Bronze	Med.	Sept. 20	4.00
Scarlet Crimson	(D)	Br. Red	Med.	Sept. 20	3.25
Mme. Cadillac	(P)	Rasp. Wine	Short	Sept. 20	4.00
Rouge Cushion	(C)	Br. Red	Short	Sept. 25	3.75
Br. Wonder	(P)	Rosewood	Med.	Sept. 25	3.50
Plainsman	(D)	Orange Bronze	Med.	Sept. 25	5.00
Crown Jewell	(D)	Bright Red	Short	Sept. 25	3.50
Champ. Cushion	(CD)	Dp. Bronze	Short	Sept. 25	3.00
Comd. Cushion	(CD)	Red	Short	Sept. 25	3.00
Alpena	(D)	Red	Med.	Sept. 25	6.25
Mahogany Cushion	(CD)	Jasper Red	Short	Sept. 25	3.00
Elite Cushion	(C)	Salmon Br.	Short	Sept. 25	3.50
Marionette	(P)	Rust Red	Med.	Sept. 25	3.25
Holiday (H)	(P)	Golden Br.	Med.	Sept. 25	3.50
*Remembrance	(LD)	Dp. Carmine	Med.	Sept. 28	3.50
Lipstick	(C)	Ruby Orange	Short	Sept. 28	4.00
Kath. Lehman	(LD)	Orange Br.	Med.	Sept. 28	3.50
Morocco (New)	(D)	Reddish Br.	Short	Oct. 1	7.50
Caprice (New)	(D)	Apricot Br.	Med.	Oct. 1	7.50
Admiration	(LD)	Salmon Fawn	Med.	Sept. 28	3.25
*Iron Mountain	(P)	Deep Red	Med.	Oct. 1	6.25
Jubilee (H)	(P)	Crimson	Med.	Oct. 1	4.00
Royal Ruby	(P)	Dark Crimson	Med.	Oct. 1	4.00
Mogul	(P)	Orange Rust	Med.	Oct. 1	4.00
Reverie	(D)	Buff Bronze	Med.	Oct. 1	5.00
Fiesta	(P)	Orange Rust	Tall	Oct. 1	3.50
Magnificent	(LD)	Plum Red	Tall	Oct. 1	3.50
Red Cloud (Cushion)	(CD)	Scarlet	Med.	Oct. 1	3.50
Red Riding Hood	(D)	Br. Red	Med.	Oct. 1	3.25
Sam Williston (Cushion)	(CS)	Deep Red	Short	Oct. 1	3.25
Gondolier	(LD)	Crimson	Med.	Oct. 1	5.00
Leshara	(D)	Mulberry Red	Med.	Oct. 1	3.75
Bonfire	(D)	Br. Red	Med.	Oct. 1	3.75
Regina	(LD)	Apricot Br.	Med.	Oct. 1	4.00
Fire Engine	(S)	Flaming Red	Med.	Oct. 1	3.75
Card. Spoon	(Spoon)	Red Bronze	Med.	Oct. 1	3.50
Firecracker	(D)	Mahogany	Tall	Oct. 5	4.00
Cydonia	(LD)	Mahogany	Tall	Oct. 5	3.00
*Sept. Cheer	(S)	Cherry Red	Med.	Oct. 5	3.00
Burgundy	(LD)	Wine Red	Tall	Oct. 5	3.00
Ruby Pompon	(P)	Ruby Crimson	Med.	Oct. 5	3.00
Red Torch	(S)	Bright Red	Med.	Oct. 5	3.00
Red Velvet	(LD)	Dk. Crimson	Med.	Oct. 5	3.50
*Mona	(P)	Rust Bronze	Med.	Oct. 5	3.50
Avalon	(P)	Orange Bronze	Tall	Oct. 5	3.75
Courageous	(LD)	Dark Ruby	Med.	Oct. 5	3.25
*Mrs. Du Pont	(LD)	Coral Buff	Tall	Oct. 5	3.75
Granada (New)	(D)	Coppery Br.	Tall	Oct. 8	7.50
Buckeye	(P)	Salmon Br.	Med.	Oct. 8	4.00
Beacon	(LD)	Coral Apr.	Tall	Oct. 8	3.25
Aviator	(P)	Copper	Med.	Oct. 8	3.25
Success	(LP)	Dp. Crimson	Med.	Oct. 8	4.00
Miguel	(D)	Rasp. Red	Tall	Oct. 8	4.00
Gladiator (New)	(D)	Orange Red	Tall	Oct. 10	7.50
*D Calumet (H)	(D)	Apricot	Med.	Oct. 10	3.75
Huntsman	(LD)	Scarlet Or.	Tall	Oct. 10	3.75
Carnival	(LP)	Burnt Orange	Med.	Oct. 10	3.75

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE LIST ON PAGE 109 FOR QUANTITY PRICES.

Garden Varieties

Variety	Size and Type	Color	Height	Matures	Price per 50
BRONZE and RED (Cont'd)					
*Caravan.....	(LD)	Salmon Br.	Med.	Oct. 10	4.00
Blueblood.....	(D)	Amaranth Red	Tall	Oct. 10	3.50
Carmine Queen.....	(LP)	Carmine	Tall	Oct. 10	3.75
Bamboo.....	(S)	Buff Orange	Tall	Oct. 10	3.75
Fireside.....	(D)	Burnt Orange	Tall	Oct. 10	3.50
Admiral.....	(D)	Dark Red	Med.	Oct. 12	4.00
Fashion.....	(D)	Rosewood	Med.	Oct. 12	3.50
Witchery.....	(D)	Golden Br.	Med.	Oct. 12	3.50
Crusader (New).....	(D)	Crimson Red	Med.	Oct. 12	7.50
*James Stewart.....	(P)	Apr. Gold	Tall	Oct. 15	3.75
Robinhue.....	(LD)	Dork Red	Tall	Oct. 15	3.75
Bokhara.....	(D)	Brilliant Red	Med.	Oct. 15	3.75
Rajah.....	(S)	Scarlet	Tall	Oct. 15	3.75
Chopin.....	(L-Inc.)	Lt. Bronze	Med.	Oct. 15	5.00
Moonmaid.....	(P)	Salmon Bronze	Med.	Oct. 15	4.00

PINK and LAVENDER

Gladness.....	(D)	Chinese Rose	Short	Aug. 28	3.75
Cecil Beed.....	(D)	Deep Lav.	Med.	Sept. 1	3.75
Dr. Longley.....	(D)	Rose Pink	Med.	Sept. 1	4.00
Sal. Precose.....	(LD)	Salmon Pk.	Short	Sept. 1	3.50
Amelia.....	(C)	Lav. Pink	Short	Sept. 5	3.25
Rosa.....	(C)	Rose Pink	Med.	Sept. 5	5.00
Dean Kay.....	(C)	Shell Pink	Short	Sept. 5	3.25
Purple Star.....	(P)	Purple	Med.	Sept. 5	3.25
*Joan Helen.....	(D)	Dk. Purple	Med.	Sept. 10	3.25
*D Nye's Favorite.....	(D)	Lavender	Med.	Sept. 10	3.50
Barbara Small.....	(P)	Lavender	Tall	Sept. 10	3.25
*Orchid Helen.....	(D)	Orch. Lavender	Med.	Sept. 10	4.00
Successor.....	(D)	Sil. Lav.	Med.	Sept. 10	3.75
Lorenzo.....	(Spoon)	Dark Purple	Med.	Sept. 15	3.50
Royal Robe.....	(D)	Purple	Med.	Sept. 15	4.00
Chippewa.....	(LD)	Br. Purple	Med.	Sept. 15	3.25
Violet.....	(D)	Bright Purple	Med.	Sept. 15	3.50
Fairbow.....	(P)	Lav. Pk.	Med.	Sept. 20	3.50
Tapestry.....	(LD)	Br. Pink	Med.	Sept. 20	3.50
Heather Bloom.....	(D)	Heather Pk.	Med.	Sept. 20	3.25
*Alert.....	(LD)	Dk. Purple	Med.	Sept. 20	3.00
Olive Longland.....	(LD)	Apr. Salmon	Med.	Sept. 25	3.00
Evangeline.....	(LD)	Flesh Pink	Med.	Sept. 25	4.00
Jewelstone.....	(P)	Rose Pink	Short	Sept. 25	7.50
Lady's Choice.....	(LD)	Ivory Pink	Med.	Sept. 25	7.50
Reflection.....	(D)	Rosy Lavender	Med.	Sept. 25	7.50
*Petrisian Rose.....	(P)	Lav. Rose	Med.	Sept. 25	4.00
*Cecelia.....	(C)	Purple	Short	Sept. 25	3.50
Imp. E. Wonder.....	(P)	Lavender	Med.	Sept. 25	3.50
*Spellbound.....	(D)	Lavender	Med.	Sept. 25	3.25
Capt. J. Smith.....	(C)	Lav. Pink	Short	Sept. 25	3.00
*Maj. Cushion.....	(C)	Lavender	Short	Sept. 25	3.25
Coquette.....	(C)	Rosy Pink	Short	Sept. 25	6.25
Rosita.....	(B)	Lav. Rose	Med.	Sept. 28	3.25
Joyous.....	(C)	Rosy Pink	Short	Sept. 28	7.50
Malinda Brown.....	(P)	Lav. Rose	Med.	Sept. 28	3.75
Betty.....	(LD)	Pk. Rose Ctr.	Tall	Sept. 28	3.75
Twinkle.....	(C)	Rose Purple	Med.	Sept. 28	4.00
Misty Maid.....	(D)	Light Pink	Med.	Sept. 28	3.50
Pat. Lehman.....	(D)	Peach Pink	Tall	Sept. 28	3.50
Aristocrat (H).....	(LD)	Deep Wine	Med.	Sept. 28	6.25
Fascination.....	(LD)	Lav. Pink	Med.	Oct. 1	4.00
*D Myrtle Walgreen.....	(LP)	Amar. Purple	Med.	Oct. 1	3.50
Troubadour.....	(D)	Crimson	Med.	Oct. 1	3.50
Tiffany Rose.....	(S)	Deep Rose	Med.	Oct. 1	3.25
Old Lavender.....	(LD)	Lavender	Med.	Oct. 1	6.25
Sonny.....	(P)	Deep Lav.	Med.	Oct. 1	4.00
Mayflower (New).....	(P)	Soft Pink	Med.	Oct. 1	7.50

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE LIST ON PAGE 109 FOR QUANTITY PRICES.

Garden Varieties

Variety	Size and Type	Color	Height	Matures	Price per 50
PINK and LAVENDER (Cont'd)					
*Mischief.....	(CS)	Purple	Short	Oct. 1	5.00
Charm Spoon.....	(Spoon)	Rose	Med.	Oct. 1	3.75
Alex Cummings.....	(LD)	Deep Rose	Tall	Oct. 3	4.00
Northern Queen.....	(D)	Lavender	Med.	Oct. 5	4.00
*Petrisian Mauve.....	(D)	Mauve	Med.	Oct. 5	4.00
*Petrisian Pink.....	(D)	Lt. Pink	Med.	Oct. 5	4.00
*Lav. Lady.....	(D)	Lav. Pk.	Tall	Oct. 5	4.00
Corona (H).....	(S)	Dp. Lav.	Tall	Oct. 10	4.00
Ponca.....	(SD)	Dk. Lav.	Short	Oct. 10	3.50
Dream Girl.....	(P)	Lt. Lav.	Med.	Oct. 10	4.00
*Courtier.....	(D)	Lav. Pk.	Med.	Oct. 10	4.00
*Time.....	(LP)	Lav.	Med.	Oct. 10	3.50
*Orchid Spoon.....	(Spoon)	Orch. Lav.	Med.	Oct. 10	3.75
Rose Spoon.....	(Spoon)	Lav. Rose	Med.	Oct. 10	3.50
Lassie.....	(LD)	Dk. Pink	Med.	Oct. 10	3.75
*Masquerade.....	(C)	Lav. Rose	Med.	Oct. 10	3.75
*Joybringer.....	(D)	Salmon Rose	Short	Oct. 10	3.50
Ronnie.....	(B)	Dk. Lav.	Med.	Oct. 12	4.00
Allegro.....	(C)	Shrimp Pk.	Med.	Oct. 12	4.00
Adagio.....	(P)	Raspberry Rose	Tall	Oct. 12	3.50
*Jewell.....	(P)	Lav. Pk.	Med.	Oct. 15	3.50
Sonnet.....	(P)	Salmon Pk.	Med.	Oct. 15	4.00
Enterprise.....	(P)	Amaranth	Tall	Oct. 15	3.75
Elizabeth Hood.....	(LD)	Lav. Pk.	Med.	Oct. 15	3.75
Citation.....	(LP)	Deep Pink	Med.	Oct. 15	3.75

LARGE FLOWERING MUMS WHICH ARE NORMALLY GROWN IN THE GREENHOUSE, BUT ARE ALSO GOOD OUTSIDE, SHOULD BE ORDERED TO ONE BLOCK PER ITEM.

WHITE

Silver Sheen.....	(M-Inc.)	White	Med.	Oct. 20	3.25
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YELLOW

Harvest Golden.....	(M-Inc.)	Dp. Golden	Tall	Oct. 10	3.50
*D Gold Lode.....	(M-Ref.)	Dp. Golden	Tall	Oct. 15	3.50
Celestra.....	(M-Inc.)	Lemon	Tall	Oct. 15	3.75
Mrs. Kidder.....	(L-Inc.)	Dp. Lemon	Tall	Oct. 15	3.50
Buttercup (H).....	(M-Inc.)	Golden	Short	Oct. 15	5.00
Valiant.....	(M-Inc.)	Lt. Golden	Short	Oct. 15	6.25
Honeysweet.....	(M-Inc.)	Golden Yel.	Med.	Oct. 15	6.25
Michigan (New).....	(M-Inc.)	Yellow	Med.	Oct. 12	7.50
Sunburst (New).....	(L-Dec.)	Golden Yellow	Med.	Oct. 12	7.50

BRONZE

Amber Bright.....	(M-Inc.)	Amber Bronze	Med.	Oct. 15	3.75
Chopin.....	(M-Inc.)	Lt. Bronze	Med.	Oct. 15	5.00

PINK

Pink Chief.....	(L-Inc.)	Lavender	Tall	Oct. 15	3.50
Major Bowes.....	(L-Inc.)	Dp. Lav.	Tall	Oct. 15	3.75

PINCHING SCHEDULE FOR GARDEN CHRYSANTHEMUMS

Natural Flowering Date	Pinching Date for Cut Flowers	Pinching Date for Border Plants
Sept. 1	June 11	July 9
Sept. 15	June 18	July 16
Sept. 30	June 25	July 23
Oct. 10	July 2	July 30
Oct. 15	July 9	Aug. 6

MINIMUM ORDER 50 CUTTINGS OF A VARIETY. SEE LIST ON PAGE 109 FOR QUANTITY PRICES.

Flower Holiday Calendar

St. Valentine's Day • Easter • Mothers' Day • Memorial Day • Thanksgiving • Christmas

1956													
S M T W T F S							S M T W T F S						
JAN. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31							JULY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						
FEB. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29							AUG. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						
MAR. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31							SEP. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30						
APR. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30							OCT. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						
MAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31							NOV. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30						
JUNE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30							DEC. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						

1957													
S M T W T F S							S M T W T F S						
JAN. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31							JULY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						
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MAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31							NOV. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30						
JUNE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30							DEC. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31						

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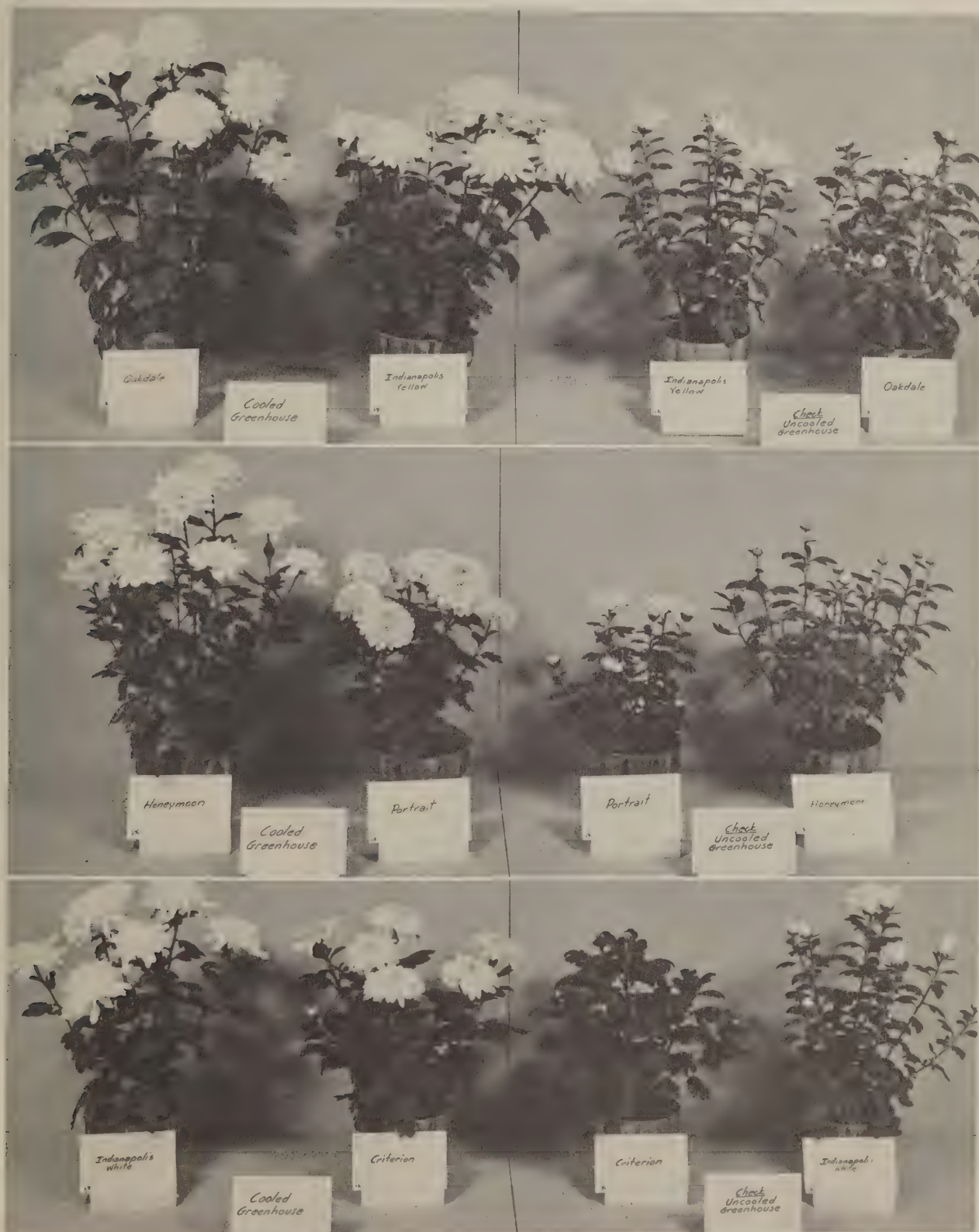
BLOOMING RESPONSE OF CHRYSANTHEMUMS

GROWN IN AN AIR COOLED GREENHOUSE

The photographs below show the contrast in blooms on Chrysanthemums grown in a cooled and uncooled greenhouse at Texas A & M in a test being conducted by Dr. A. F. DeWorth. See page 1 for additional information on greenhouse cooling.

COOLED

UNCOOLED



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INSECTICIDES, FUNGICIDES AND FUMIGANTS

Aldrin (25%)		4 lb. bag	2.00
Aramite 15W		4 lb. bag	3.20
Chlorabenzilate 25W		4 lb. bag	4.20
Deenate 50-W (DDT)	4 lbs.	2.25	48 lb. Case 21.60 (12 - 4 lb. bags)
Dieldrin (50%)		4 lb. bag	6.60
Fermate	3 lbs.	2.45	Case (36 lbs.) 25.80
Carton (24 cans)			
Fulex Parathion Fumigators	1,000 cu. ft.	10.50	5,000 cu. ft. 13.50
For Red Spiders, Aphids, and Thrips.....	2,000 cu. ft.	10.50	10,000 cu. ft. 16.10 20,000 cu. ft. 25.00
Fulex Aphid-Smoke Fumigators	1,000 cu. ft.	10.00	5,000 cu. ft. 13.00
For Aphids and Adult White Flies.....	2,000 cu. ft.	10.00	10,000 cu. ft. 16.00 20,000 cu. ft. 24.00
Fulex Spider-Mite Fumigators			
For Red Spiders, including some Parathion-resistant strains on carnations, chrysanthemums and snapdragons	1,000 cu. ft.	10.50	5,000 cu. ft. 13.50
	2,000 cu. ft.	10.50	10,000 cu. ft. 18.00 20,000 cu. ft. 30.00
Isotox 1 (supplied in 50 lb. bags only).....	50 lbs.	8.50	
Lindane (25%)			4 lb. bag 7.60
Malathion (25%)			4 lb. bag 3.25
Nicofume Liquid			gallon (8 lbs.) 13.80
Nicofume Pressure Fumigators	½ lb. cans (12 cans)		5.65
	1 lb. cans (12 cans)		10.70
NNOR		gal.	10.00
Optox (10% DDT)		gal.	12.00
Orthocide 50 W	5 lbs.	5.70	50-lb. drum 54.00
Plantfume 103	5,000 cu. ft. carton	— 36	10.50
	20,000 cu. ft. carton	— 12	12.00
Parathion Spray 15% Wettable		4 lb. bag	3.50
Parzate (Powder)	3 lb. bags	2.85	Case (36 lbs.) 31.20
(Liquid)			5 gal. cans 9.50
P-40	25 lbs.	12.00	50 lbs. 22.50 100 lbs. 43.00
Sodium Selenate		1 lb.	17.00
Vapotone XX		1 gal.	12.00
Zerlate	3 lbs.	2.45	case (36 lbs.) 25.80

Prices subject to change
without notice

For your other needs refer to your

Gloeckner¹

Carnation Manual and Seed Catalog

or see your Gloeckner Representative

